FIRE COMMISSIONER'S STATISTICAL REPORT 1983

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INTRODUCTION

64TH STATISTICAL REPORT OF THE FIRE COMMISSIONER

The Fire Prevention Branch strives to reduce the number of injuries and deaths caused by fires, the number of fires and fire related property damage.

W.D. MacKay
Fire Commissioner

Branch personnel regularly inspect buildings and facilities which are subject to provincial fire regulations. The purpose of the inspection is to ensure that they meet acceptable levels of fire safety. Other buildings are inspected upon complaint. Staff conduct in-depth investigations of fires throughout the province and assist police and fire departments engaged in fire investigation activities. A high priority is given to the investigation of fire deaths, arson fires and fires involving large property loss. They develop and present training and information programs for members of municipal and industrial fire departments in Alberta. In addition to providing technical assistance to municipalities on fire prevention and protection, staff also conduct fire safety education programs for the general public and collect and disseminate statistical information on fires.

During the 1983-84 fiscal year the development of an Alberta Fire Code was a major undertaking. Revisions to the Fire Prevention Act in 1983 provided a suitable legislative base for the development of a Fire Code for Alberta. The purpose of the Code was to abolish individual fire by-laws at the municipal level and to provide a uniform fire safety regulation across the province. The National Fire Code of Canada published by the National Research Council was selected as the base document. A draft of a proposed code was distributed to numerous organizations, associations, companies, fire departments, municipalities, government agencies and interested individuals with a request for comment. Forty-three briefs were received in response to the request and included over 400 items of concern to the submitters. Each brief was reviewed by Branch staff and by the members of the Fire Prevention Council and appropriate changes were incorporated. Following the review by the Council members, they recommended that the revised document be considered for future adoption as a regulation in Alberta to be known as the Alberta Fire Code.

Providing programs aimed at fire prevention is a major activity of the Branch. Staff offer various services directed to this end including public education programs dealing with the hazards of fire, sources of ignition and methods of preparing for a fire. Inspection services are also available from staff at regional offices throughout Alberta. Special emphasis is placed on the inspection of assembly, institutional and residential buildings in smaller centres where the fire prevention resources of the fire departments are limited. The table on page 5 indicates that the number of inspections conducted by Branch personnel increased by 9% over the previous year. Apartments, hotels and motels were given high priority during the year in order to ensure that fire alarm systems and detection devices were functioning as intended.

The Fire Prevention Council which was established last year effectively carried out their responsibilities as an appeal body and as advisors to the Minister. In addition to the major undertaking of reviewing submissions for the Fire Code, 9 orders were appealed to the Council.

A special training guide called Fire Safety Planning for Health Care Facilities in Alberta was developed and presented to a number of hospitals and nursing homes who are using it as their training manual. It has been well received and a number of health-care-related agencies and departments in other provinces have requested copies.

Regional fire prevention committees made up of fire department representatives continue to meet regularly with Branch staff to discuss concerns about fire prevention and inspection programs. Of particular significance is the increased interest in fire prevention at the municipal level generated through these organizations.

Each year a number of fire losses are subjected to detailed examination by police and fire officials throughout the Province. This type of investigation is usually carried out when a death occurs as a result of the fire, when arson is suspected, when the cause of a fire is not known or when a major loss occurs. During 1983-84, 1,092 of these in-depth investigations were carried out and Fire Prevention Branch staff investigators were called upon to assist in 318. The investigations conducted during the year revealed 780 arson fires, a reduction of 31% from the previous year.

Another major activity of the Branch is the training of municipal and industrial fire department personnel. In order to make the most effective use of the Department's Alberta Fire Training School, new emphasis is being placed on training by local fire departments. All course material and the necessary training aids are provided by the School with instruction staff being provided by the local municipality. Successful candidates are awarded a certificate issued by the School. This method of program delivery releases the facilities at Vermilion in order to better utilize the special training aids available at the School. The number of persons participating in courses sponsored by the Alberta Fire Training School increased by 15% during the year.

As a special aid to interested parties, the Branch presented 3 special one-day seminars covering the subjects of breathing apparatus, fire extinguishers and water supplies for firefighting. Attendance at the seminars was 298. This type of presentation generates a great deal of interest at the local level and increases the demand for further fire safety education. Section C of the table on page 5 provides additional information on Branch training programs.

During the 1983/84 fiscal year a contract was awarded by the Branch to an Alberta engineering firm as the second phase of a study on the costs of smoke control systems in high buildings. The first phase of the study was completed during the 1982/83 year and confirmed that the cost of installing sprinkler systems compared favourably with other methods of smoke control. The second phase which addressed the question of maintenance costs showed that sprinkler systems were as cheap to maintain as most other smoke control systems. The study has generated a lot of interest among architects and engineers. A paper outlining the findings of the study was presented at the international level to the National Fire Protection Association fall meeting in Orlando, Florida.

Comparative Statistical Summary

for the three years ending March 31, 1982, 1983, 1984

	1981-82 No.	1982-83 No.	1983-84 No.
A. Fire Prevention			
Building fire inspections conducted	3,123	2,204	2,624
- recommendations to correct hazards issued	9,892	6,401	8,028
- orders to remedy conditions issued	1	4	3
Plans examined	749	588	595
Meetings and lectures conducted	1,546	1,276	1,151
- attendance	34,831	25,831	16,908
B. Fire Investigation			
Investigations conducted by Branch	339	420	318
Investigations by other agencies	1,137	1,079	774
Total	1,476	1,499	1,092
Causes of Fires Investigated			
- arson	1,076	1,126	780
- accidental or unknown	400	373	298
- under investigation	—	—	14
Total	1,476	1,499	1,092
C. Fire Service Personnel Training	**Attendance**		
Alberta Fire Training School Municipal Training Programs			
Course Title (Duration 44 hrs.)			
Part I Firefighter	241	132	146
Part II Firefighter	111	143	90
Part III Firefighter	73	88	60
Part IV Firefighter	20	56	77
Part V Firefighter	—	—	19*
Part VI Firefighter	—	—	22*
Pump Operator "A"	37	38	36
Pump Operator "B"	21	31	13
Fire Service Instructor	35	19	12
Fire Prevention for Firefighters	22	—	21
Fire Officer C1, Building Construction	53	—	7
Fire Officer C2, Leadership	22	51	6
Fire Officer C3, Pre-fire Planning	—	20	13
Fire Officer C4, Fire Suppression and Safety	—	20	12
Fire Officer C5, Strategy and Tactics	—	—	16*
Fire Officer C7, Fire Investigation	91	45	35
Fire Prevention Officer D1, Water Supply	—	11	—
Fire Prevention Officer D2, Standpipe and Sprinkler Systems	—	—	14*
Total Municipal Fire Department Personnel Attending A.F.T.S.	726	654	599

Comparative Statistical Summary

for the three years ending March 31, 1982, 1983, 1984 (Cont.)

	1981-82	1982-83	1983-84
C. Fire Service Personnel Training (Cont.)	Attendance		
Extention Courses — Municipal Presentation			
Course Title (Duration 44 hrs.)			
Part I Firefighter	80	286	339
Fire Prevention for the Firefighter	—	50	45
Fire Officer C7, Fire Investigator	—	—	49*
Personnel Attending A.F.T.S. Sponsored Extension Courses	80	336	433
Total Municipal Fire Department Personnel	806	990	1,032
Industrial Programs			
Course Title (Duration as indicated)			
Part I Industrial Firefighter (16 hrs.)	—	61	88
Part IA Industrial Firefighter (8 hrs.)	65	64	99
Part II Industrial Firefighter (16 hrs.)	—	55	98
Part III Industrial Firefighter (16 hrs.)	—	—	38*
Aircraft Crash/Fire Response - Dry Chemical	—	12	—
Total Industrial Fire Department Personnel	65	192	323
Grand Total Attendance at A.F.T.S. Sponsored Courses	871	1,182	1,355
One-day Seminars	146	111	185
Two-day Seminars	—	—	23

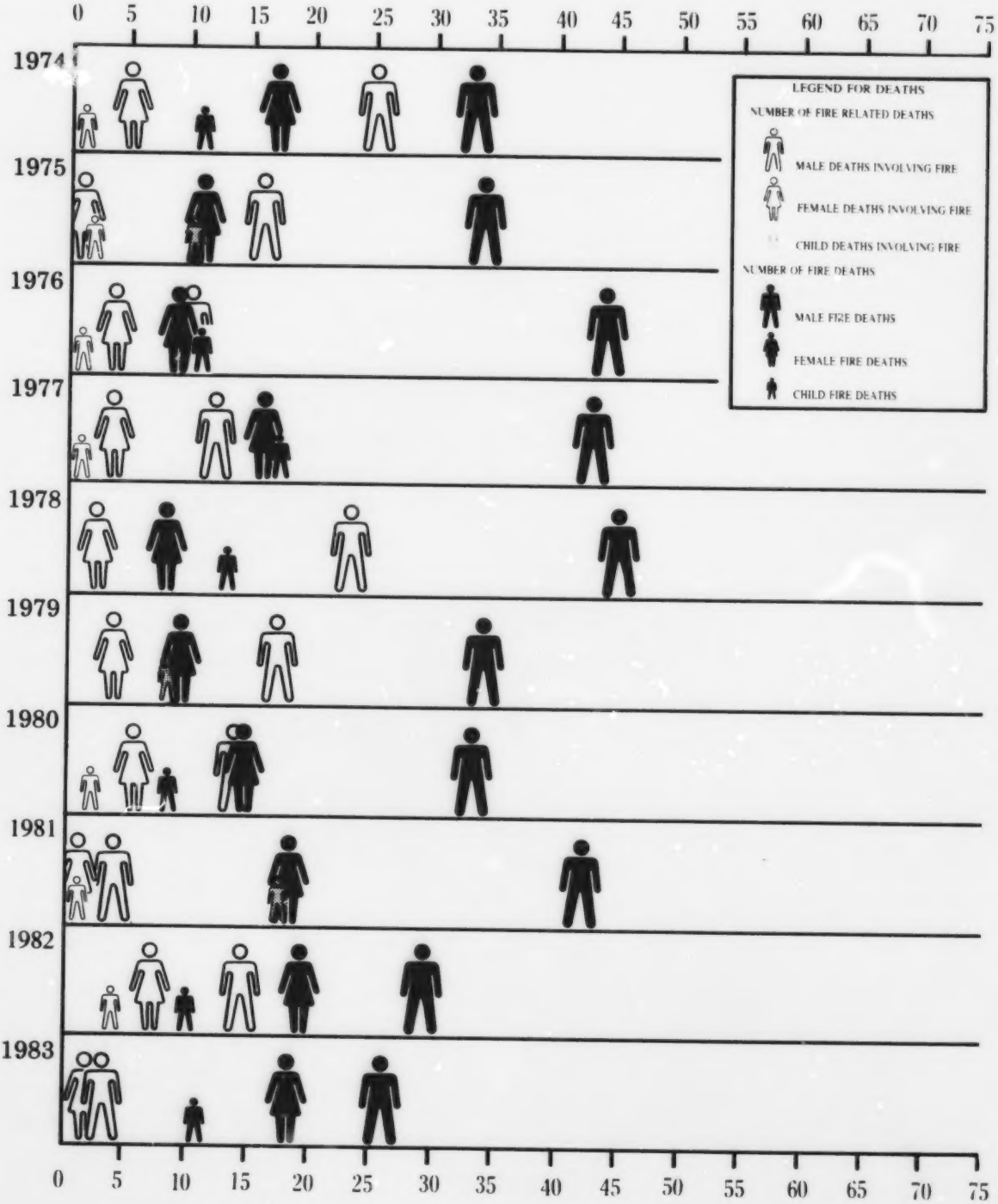
*These courses were offered for the first time in 1983/84

SECTION ONE

ALBERTA FIRE CASUALTIES

DEATHS INVOLVING FIRE AND FIRE DEATHS

Fire deaths refer to persons who died directly as a result of the fire, either by smoke inhalation or burns. Deaths **involving** fire refer to persons who were in a place where fire occurred, but who may have died from a cause other than the fire itself (e.g. a person who dies in an automobile accident where the vehicle catches fire, a suicide, a death in an arson fire).

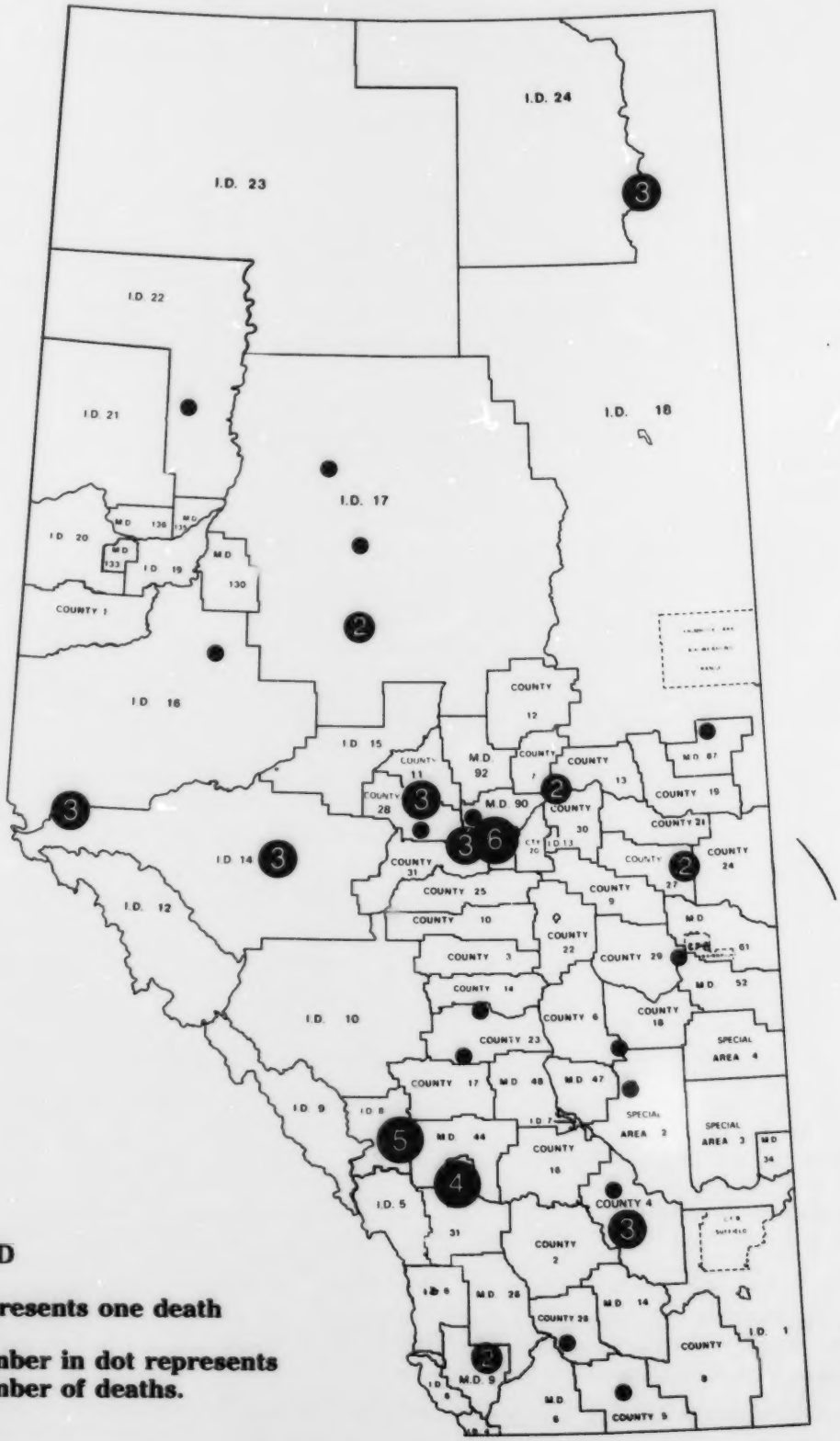


DEATH RATES

	ALBERTA					CANADA
Year	Population	Fire Deaths	Other Deaths Involving Fire	Total Deaths	Fire Death Rate*	Fire Death Rate*
1974	1,722,000	61	31	92	3.5	4.1
1975	1,778,000	55	19	74	3.1	3.6
1976	1,838,000	64	14	78	3.5	3.7
1977	1,894,000	76	16	92	4.0	3.5
1978	1,954,000	66	25	91	3.4	3.6
1979	2,014,000	51	21	72	2.5	3.1
1980	2,146,000	55	21	76	2.6	3.4
1981	2,278,000	77	6	83	3.4	2.9
1982	2,332,000	58	25	83	2.5	2.7
1983	2,336,000	55	5	60	2.4	—

* Deaths per 100,000 population

FIRE DEATHS BY GEOGRAPHIC LOCATION 1983



LEGEND

- ● **represents one death**
- (5) **number in dot represents number of deaths.**

CASUALTIES BY AGE AND SEX
1983

Casualty	AGE IN YEARS									Total
	0-5	6-15	16-25	26-35	36-45	46-55	56-65	Over 65	Unknown	
Fire Deaths										
Civilian:										
Male	4	0	9	1	1	1	3	11	0	30
Female	6	1	7	1	0	1	2	7	0	25
Firefighter:										
Male	0	0	0	0	0	0	0	0	0	0
Female	0	0	0	0	0	0	0	0	0	0
Total Deaths	10	1	16	2	1	2	5	18	0	55
Injuries										
Civilian:										
Male	8	20	62	63	35	33	11	7	34	273
Female	7	5	17	21	9	8	4	2	12	85
Firefighter:										
Male	0	0	8	35	21	5	0	0	11	80
Female	0	0	0	0	0	0	0	0	0	0
Total Injuries	15	25	87	119	65	46	15	9	57	438

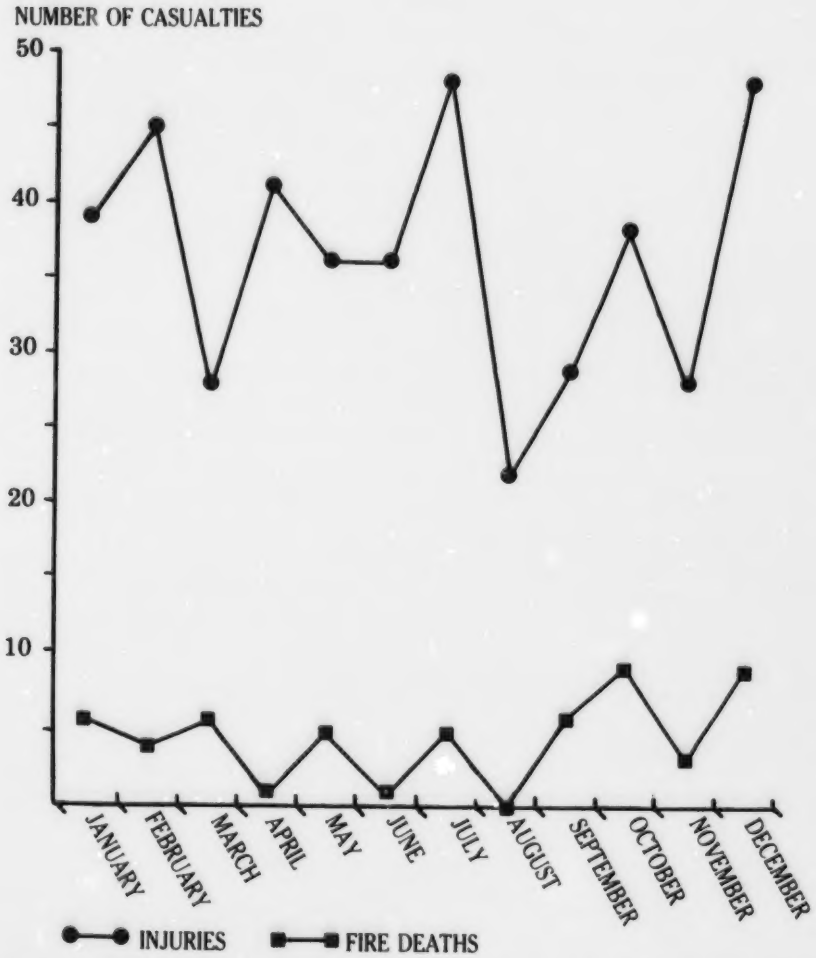
Commentary: The greatest number of fire deaths occurred in the over 65 age category followed closely by the 16-25 and 0-5 categories. Injuries were greatest in the 26-35 category.

CONDITIONS OF CASUALTIES
1983

Condition of Casualty	Fire Deaths	% of Total	Injuries	% of Total
Asleep at time of fire	29	52.7	60	13.7
Bedridden or other physical handicap	4	7.3	0	—
Impairment by alcohol, drugs or medication	8	14.5	32	7.3
Awake and no physical or mental impairment at the time of fire	3	5.5	274	62.6
Under restraint or detention	0	—	0	—
Too young to react to fire emergency	3	5.5	11	2.5
Mental handicap (senile)	0	—	0	—
Left unattended (children)	1	1.8	2	.5
Condition of casualty - unclassified or unknown	7	12.7	59	13.5
TOTAL	55	100.0	438	100.1

Commentary: Where the condition of the victim was known in a fatal fire, the victim was usually asleep or impaired by alcohol. The most common known factor for the injured victim was that he was awake and had no physical or mental impairment at the time of fire.

CASUALTIES BY MONTH
1983



Commentary: The number of fire deaths per month is highest in the months of October and December. December and July recorded the highest number of injuries.

CASUALTIES BY TIME PERIOD
1983

Time Period	Fire Deaths	% of Total	Injuries	% of Total
6:31 a.m. - 2:30 p.m.	25	45.5	150	34.2
2:31 p.m. - 10:30 p.m.	8	14.5	174	39.7
10:31 p.m. - 6:30 a.m.	22	40.0	109	24.9
Unknown	0	—	5	1.1
TOTAL	55	100.0	438	99.9

Commentary: The percentage number of deaths between 2:31 p.m. and 10:30 p.m. was significantly lower than the other two time periods; however, the percentage number of injuries was highest at this time.

FIRE DEATHS BY MAJOR PROPERTY CLASSIFICATIONS 1983

Property Classification	Fire Deaths	% of Total	Deaths Involving Fire	% of Total
ASSEMBLY				
Theatre, Studio, Auditorium	0	—	0	—
Amusement, Recreation Place	0	—	0	—
School, College, University	0	—	0	—
Church, Funeral Parlour	0	—	0	—
Clubs, Social, Sport	0	—	0	—
Museum, Art Gallery, Library	0	—	0	—
Food or Beverage Establishment	0	—	0	—
Passenger Terminal, Station	0	—	0	—
Miscellaneous	0	—	0	—
Sub-Total	0	—	0	—
INSTITUTIONAL				
Prison, Jail, Reformatory	0	—	0	—
Home for the Aged	1	1.8	0	—
Child Care	0	—	0	—
Hospital, Sanatorium, Clinic	0	—	0	—
Miscellaneous	0	—	0	—
Sub-Total	1	1.8	0	—
RESIDENTIAL				
One and Two Family Dwellings	37	67.3	1	20.0
Apartment	2	3.6	0	—
Rooming, Boarding House	0	—	1	20.0
Hotel	0	—	0	—
Motor Hotel	0	—	0	—
Dormitory	0	—	0	—
Mobile Home	11	20.0	0	—
Miscellaneous	0	—	0	—
Sub-Total	50	90.9	2	
BUSINESS AND PERSONAL SERVICE				
Office	0	—	0	—
Personal Service	0	—	0	—
Electronic Equipment	0	—	0	—
Miscellaneous	0	—	0	—
Sub-Total	0	—	0	—
MERCANTILE				
Food, Beverage Sale	0	—	0	—
Textile, Wearing Apparel Sale	0	—	0	—
Furniture, Appliance, Hardware Sales	0	—	0	—
Books, Newspapers, Drugs, Specialties	0	—	0	—
Recreation, Hobby Supplies	0	—	0	—
Repair Shop, Laundry, Dry Cleaner	0	—	0	—
Motor Vehicles, Boats, Sales and Service	0	—	0	—
Department, Variety Store	0	—	0	—
Miscellaneous	0	—	0	—
Sub-Total	0	—	0	—

FIRE DEATHS BY MAJOR PROPERTY CLASSIFICATIONS 1983 (Cont.)

Property Classification	Fire Deaths	% of Total	Deaths Involving Fire	% of Total
INDUSTRIAL MANUFACTURING PROPERTIES				
Chemicals, Petroleum, Paints, Plastics	0	—	0	—
Wood, Furniture, Paper, Printing	0	—	0	—
Metal, Metal Products, Electrical Equipment and Appliances	0	—	0	—
Food Processing	0	—	0	—
Beverage, Tobacco, Soap, Margarine	0	—	0	—
Textiles	0	—	0	—
Wearing Apparel, Footwear	0	—	0	—
Vehicles and Related Equipment	0	—	0	—
Miscellaneous	0	—	0	—
Sub-Total	0	—	0	—
STORAGE PROPERTIES				
Agricultural Products	0	—	0	—
Textiles, Fibres, Clothing	0	—	0	—
Processed Food, Beverage	0	—	0	—
Flammable Liquids, Gases, Petroleum Products	0	—	0	—
Wood, Furniture, Paper and Products	0	—	0	—
Chemicals, Plastics, Paints	0	—	0	—
Metal Products, Machinery, Electrical Appliance	0	—	0	—
Vehicle	0	—	0	—
Miscellaneous	0	—	0	—
Sub-Total	0	—	0	—
SPECIAL PROPERTY — TRANSPORTATION EQUIPMENT				
Outdoor Property	1	1.8	0	—
Special Connecting Thoroughfares	0	—	0	—
Under Construction/Demolition: Vacant	0	—	0	—
Watercraft	0	—	1	20.0
Rail Transport Vehicle and Equipment	0	—	0	—
Ground Transport Vehicle	2	3.6	1	20.0
Aircraft	0	—	0	—
Special Vehicles	0	—	0	—
Other Special Property	0	—	0	—
Sub-Total	3	5.4	2	40.0
MISCELLANEOUS PROPERTY				
Laboratories	0	—	0	—
Farm Facilities	1	1.8	0	—
Miscellaneous Outbuildings	0	—	0	—
Utility	0	—	1	20.0
Cement, Glass, Pottery Manufacturing	0	—	0	—
Mining, Quarrying	0	—	0	—
Communications	0	—	0	—
Nucleonics	0	—	0	—
Miscellaneous	0	—	0	—
Sub-Total	1	1.8	1	20.0
TOTAL	55	99.9	5	100.0

Commentary: Over 90% of fire deaths occurred in residential properties.

INJURIES BY MAJOR PROPERTY CLASSIFICATIONS 1983

Property Classification	Minor Injuries	Light Injuries	Serious Injuries	Total Injuries	% of Total
ASSEMBLY					
Theatre, Studio, Auditorium	0	0	0	0	—
Amusement, Recreation Place	1	0	0	1	.2
School, College, University	10	2	1	13	3.0
Church, Funeral Parlour	1	0	0	1	.2
Clubs, Social, Sport	2	1	0	3	.7
Museum, Art Gallery, Library	0	0	0	0	—
Food or Beverage Establishment	2	2	0	4	.9
Passenger Terminal, Station	0	0	0	0	—
Miscellaneous	0	0	0	0	—
Sub-Total	16	5	1	22	5.0
INSTITUTIONAL					
Prison, Jail, Reformatory	0	0	0	0	—
Home for the Aged	1	0	0	1	.2
Child Care	0	0	0	0	—
Hospital, Sanatorium, Clinic	0	0	0	0	—
Miscellaneous	0	0	0	0	—
Sub-Total	1	0	0	1	.2
RESIDENTIAL					
One and Two Family Dwellings	63	58	20	141	32.2
Apartment	49	25	5	79	18.0
Rooming, Boarding House	0	1	1	2	.5
Hotel	4	1	0	5	1.1
Motor Hotel	0	0	3	3	.7
Dormitory	1	0	0	1	.2
Mobile Home	17	10	3	30	6.8
Miscellaneous	0	0	0	0	—
Sub-Total	134	95	32	261	59.6
BUSINESS AND PERSONAL SERVICE					
Office	0	4	1	5	1.1
Personal Service	0	0	0	0	—
Electronic Equipment	0	0	0	0	—
Miscellaneous	0	0	0	0	—
Sub-Total	0	4	1	5	1.1
MERCANTILE					
Food, Beverage Sale	0	0	0	0	—
Textile, Wearing Apparel Sale	0	1	0	1	.2
Furniture, Appliance, Hardware Sales	0	0	0	0	—
Books, Newspapers, Drugs, Specialties	0	0	0	0	—
Recreation, Hobby Supplies	0	0	0	0	—
Repair Shop, Laundry, Dry Cleaner	0	0	0	0	—
Motor Vehicles, Boats, Sales and Service	6	2	1	9	2.1
Department, Variety Store	0	0	0	0	—
Miscellaneous	0	0	0	0	—
Sub-Total	6	3	1	10	2.3

INJURIES BY MAJOR PROPERTY CLASSIFICATIONS 1983 (Cont.)

Property Classification	Minor Injuries	Light Injuries	Serious Injuries	Total Injuries	% of Total
INDUSTRIAL MANUFACTURING PROPERTIES					
Chemicals, Petroleum, Paints, Plastics	0	9	0	9	2.1
Wood, Furniture, Paper, Printing	1	0	0	1	.2
Metal, Metal Products, Electrical Equipment and Appliances	9	0	0	9	2.1
Food Processing	1	1	0	2	.5
Beverage, Tobacco, Soap, Margarine	0	0	0	0	—
Textiles	0	0	0	0	—
Wearing Apparel, Footwear	0	0	0	0	—
Vehicles and Related Equipment	0	0	0	0	—
Miscellaneous	2	0	0	2	.5
Sub-Total	13	10	0	23	5.3
STORAGE PROPERTIES					
Agricultural Products	1	1	0	2	.5
Textiles, Fibres, Clothing	0	0	0	0	—
Processed Food, Beverage	0	0	0	0	—
Flammable Liquids, Gases, Petroleum Products	4	0	0	4	.9
Wood, Furniture, Paper and Products	0	0	0	0	—
Chemicals, Plastics, Paints	0	0	0	0	—
Metal Products, Machinery, Electrical Appliance	0	0	0	0	—
Vehicle	13	3	1	17	3.9
Miscellaneous	1	1	0	2	.5
Sub-Total	19	5	1	25	5.7
SPECIAL PROPERTY-TRANSPORTATION EQUIPMENT					
Outdoor Property	17	5	3	25	5.7
Special Connecting Thoroughfares	0	0	0	0	—
Under Construction/Demolition: Vacant	4	3	3	10	2.3
Watercraft	1	2	2	5	1.1
Rail Transport Vehicle and Equipment	0	0	0	0	—
Ground Transport Vehicle	15	13	4	32	7.3
Aircraft	0	0	0	0	—
Special Vehicles	3	0	0	3	.7
Other Special Property	0	0	0	0	—
Sub-Total	40	23	12	75	17.1
MISCELLANEOUS PROPERTIES					
Laboratories	0	0	0	0	—
Farm Facilities	3	1	0	4	.9
Miscellaneous Outbuildings	2	0	0	2	.5
Utility	2	2	5	9	2.1
Cement, Glass, Pottery Manufacturing	0	0	0	0	—
Mining, Quarrying	1	0	0	1	.2
Communications	0	0	0	0	—
Nucleonics	0	0	0	0	—
Miscellaneous	0	0	0	0	—
Sub-Total	8	3	5	16	3.7
TOTAL	237	148	53	438	100.0

Commentary: Over 59% of injuries occurred in residential properties.

FIRE DEATHS BY ACT OR OMISSION 1983

Act or Omission	Fire Deaths	% of Total	Deaths Involving Fire	% of Total
INCENDIARY				
Arson - for fraudulent purposes	0	—	0	—
Arson - for vengeful/spiteful purposes	1	1.8	0	—
Arson - for obscuring other crime	0	—	0	—
Arson - to satisfy compulsive desires (pyromania)	0	—	0	—
Suspected Arson	0	—	1	20.0
Riot, Civil Commotion, Charges Laid	0	—	0	—
Riot, Civil Commotion, No Charges Laid	0	—	0	—
Vandalism, Mischief, Charges Laid	0	—	0	—
Vandalism, Mischief, No Charges Laid	0	—	0	—
Incendiary, Unclassified	1	1.8	0	—
Sub-Total	2	3.6	1	20.0
MISUSE OF SOURCE OF IGNITION				
Smoker's Material	12	21.8	0	—
Thawing	0	—	0	—
Inadequate Control of "Open" Fire	0	—	0	—
Child Playing With	4	7.3	0	—
Welding or Cutting Too Close To	1	1.8	0	—
Torch Too Close To	0	—	0	—
Misuse of Source of Ignition, Unclassified	0	—	0	—
Sub-Total	17	30.9	0	—
MISUSE OF MATERIAL IGNITED				
Fuel Spilled Accidentally	0	—	0	—
Improper Fuelling Technique	0	—	0	—
Flammable Liquid to Kindle Fire	0	—	0	—
Cleaning, Washing Parts	0	—	0	—
Improper Container	0	—	0	—
Overheated Cooking Oil, Grease, Wax	0	—	0	—
Combustible Placed Too Close to Heat	6	10.9	0	—
Improper Storage	1	1.8	0	—
Misuse of Material Ignited, Unclassified	1	1.8	1	20.0
Sub-Total	8	14.5	1	20.0
MECHANICAL, ELECTRICAL FAILURE, MALFUNCTION				
Part Failure, Leak, Break	0	—	0	—
Automatic Control Failure	0	—	0	—
Manual Control Failure	0	—	0	—
Electrical Short Circuit	0	—	0	—
Part Worn Out	2	3.6	0	—
Mechanical, Electrical Failure, Unclassified	9	16.4	1	20.0
Sub-Total	11	20.0	1	20.0

FIRE DEATHS BY ACT OR OMISSION 1983 (Cont.)

Act or Omission	Fire Deaths	% of Total	Deaths Involving Fire	% of Total
CONSTRUCTION, DESIGN OR INSTALLATION DEFICIENCY				
Design Deficiency	0	—	0	—
Construction Deficiency	0	—	0	—
Installed Too Close to Combustible	1	1.8	0	—
Other Installation Deficiency	0	—	0	—
Over Fusing	0	—	0	—
Suspected Faulty Connections/Aluminum Wiring	0	—	0	—
Suspected Faulty Connections/Copper Wiring	0	—	0	—
Construction Design or Installation Deficiency, Unclassified	0	—	0	—
Sub-Total	1	1.8	0	—
MISUSE OF EQUIPMENT				
Overfuelling	0	—	0	—
Misuse of Equipment, Unclassified	0	—	0	—
Sub-Total	0	—	0	—
HUMAN FAILING				
Asleep	2	3.6	0	—
Temporary Loss of Judgement	0	—	0	—
Physical or Mental Disability	0	—	0	—
Accident	1	1.8	1	20.0
Suspected Impairment by Alcohol, Drugs, Medication	1	1.8	0	—
Asleep—Suspected Use of Alcohol, Drugs, Medication	6	10.9	0	—
Ignorance of Hazard	1	1.8	0	—
Distracted, Preoccupied	0	—	0	—
Human Failing, Unclassified	0	—	1	20.0
Sub-Total	11	20.0	2	40.0
VEHICLE ACCIDENT				
Automobile	0	—	0	—
Industrial Truck	0	—	0	—
Other Road Vehicle	0	—	0	—
Rail Vehicle	0	—	0	—
Watercraft	0	—	0	—
Aircraft	0	—	0	—
Vehicle Accident, Unclassified	0	—	0	—
Sub-Total	0	—	0	—
MISCELLANEOUS				
Miscellaneous, Unclassified	0	—	0	—
Act or Omission—Cannot Be Determined	5	9.1	0	—
Sub-Total	5	9.1	0	—
TOTAL	55	99.9	5	100.0

Commentary: Improper disposal of smokers' materials was the leading cause of fatal fires.

INJURIES BY ACT OR OMISSION 1983

Act or Omission	Minor Injuries	Light Injuries	Serious Injuries	Total Injuries	% of Total
INCENDIARY					
Arson - for fraudulent purposes	0	1	1	2	.5
Arson - for vengeful/spiteful purposes	9	2	1	12	2.7
Arson - for obscuring other crime	0	1	0	1	.2
Arson - to satisfy compulsive desire (pyromania)	2	1	0	3	.7
Suspected Arson	4	5	0	9	2.1
Riot, Civil Commotion, Charges Laid	0	0	0	0	—
Riot, Civil Commotion, No Charges Laid	0	0	0	0	—
Vandalism, Mischief, Charges Laid	0	0	0	0	—
Vandalism, Mischief, No Charges Laid	1	1	0	2	.5
Incendiary, Unclassified	3	2	0	5	1.1
Sub-Total	19	13	2	34	7.8
MISUSE OF SOURCE OF IGNITION					
Smoker's Material	28	30	1	59	13.5
Thawing	1	0	0	1	.2
Inadequate Control of "Open" Fire	6	0	0	6	1.4
Child Playing With	16	9	5	30	6.8
Welding or Cutting Too Close To	3	2	0	5	1.1
Torch Too Close To	2	0	0	2	.5
Misuse of Source of Ignition, Unclassified	3	0	0	3	.7
Sub-Total	59	41	6	106	24.2
MISUSE OF MATERIAL IGNITED					
Fuel Spilled Accidentally	2	1	0	3	.7
Improper Fuelling Technique	2	1	0	3	.7
Flammable Liquid to Kindle Fire	0	1	2	3	.7
Cleaning, Washing Parts	8	0	1	9	2.1
Improper Container	0	0	0	0	—
Overheated Cooking Oil, Grease, Wax	32	11	3	46	10.5
Combustible Placed Too Close to Heat	2	5	5	12	2.7
Improper Storage	1	0	1	2	.5
Misuse of Material Ignited, Unclassified	4	1	2	7	1.6
Sub-Total	51	20	14	85	19.4
MECHANICAL, ELECTRICAL FAILURE, MALFUNCTION					
Part Failure, Leak, Break	6	8	11	25	5.7
Automatic Control Failure	3	1	1	5	1.1
Manual Control Failure	0	0	1	1	.2
Electrical Short Circuit	10	8	3	21	4.8
Part Worn Out	0	1	0	1	.2
Mechanical, Electrical Failure, Unclassified	9	8	3	20	4.6
Sub-Total	28	26	19	73	16.7

INJURIES BY ACT OR OMISSION 1983 (Cont.)

Act or Omission	Minor Injuries	Light Injuries	Serious Injuries	Total Injuries	% of Total
CONSTRUCTION, DESIGN OR INSTALLATION DEFICIENCY					
Design Deficiency	0	8	0	8	1.8
Construction Deficiency	0	1	0	1	.2
Installed Too Close to Combustible	1	4	0	5	1.1
Other Installation Deficiency	7	0	0	7	1.6
Over Fusing	0	0	0	0	—
Suspected Faulty Connections/Aluminum Wiring	0	0	0	0	—
Suspected Faulty Connections/Copper Wiring	1	0	0	1	.2
Construction, Design or Installation Deficiency, Unclassified	1	3	2	6	1.4
Sub-Total	10	16	2	28	6.4
MISUSE OF EQUIPMENT					
Overfuelling	5	1	0	6	1.4
Misuse of Equipment, Unclassified	0	0	0	0	—
Sub-Total	5	1	0	6	1.4
HUMAN FAILING					
Asleep	1	3	0	4	.9
Temporary Loss of Judgement	0	0	0	0	—
Physical or Mental Disability	0	0	0	0	—
Accident	2	2	2	6	1.4
Suspected Impairment by Alcohol, Drugs, Medication	7	3	1	11	2.5
Asleep - Suspected Use of Alcohol, Drugs, Medication	4	2	0	6	1.4
Ignorance of Hazard	22	5	1	28	6.4
Distracted, Preoccupied	1	0	0	1	.2
Human Failing, Unclassified	7	0	1	8	1.8
Sub-Total	44	15	5	64	14.6
VEHICLE ACCIDENT					
Automobile	0	0	0	0	—
Industrial Truck	3	5	2	10	2.3
Other Road Vehicle	0	0	0	0	—
Rail Vehicle	0	0	0	0	—
Watercraft	0	0	0	0	—
Aircraft	0	0	0	0	—
Vehicle Accident, Unclassified	0	0	0	0	—
Sub-Total	3	5	2	10	2.3
MISCELLANEOUS					
Miscellaneous, Unclassified	1	1	0	2	.5
Act or Omission - Cannot Be Determined	17	10	3	30	6.8
Sub-Total	18	11	3	32	7.3
TOTAL	237	148	53	438	100.1

Commentary: Improper disposal of smokers' materials was the leading cause of fires where injuries occurred, followed by overheated cooking oil.

CASUALTIES IN RESIDENTIAL PROPERTIES 1983

Casualties Related to Initial Detection of the Fire

Initial Detection	Deaths	Injuries
Smoke Alarm/Detector	0	30
Heat Alarm/Detector	0	0
Automatic Systems	0	0
Visual Sighting	49	224
Unclassified/Unknown	3	7
Total	52	261

Commentary: There were no fatalities in residential fires where the fires were initially detected by smoke alarms or smoke detectors.

Casualties by Smoke Alarm Activation

Smoke Alarm Activation	Deaths	Injuries
Activated	3	78
Didn't Activate	1	44
Unknown	5	9

Commentary: The reason the smoke alarm did not activate in the instance where there was a fatality was because it contained no battery. This also applied to 17 of the injuries.

Re: the three fatalities where the smoke alarm activated; for two of these individuals the reason it did not assist them in evacuating was because of its unsuitable location. The third victim was asleep at the time of an incendiary fire which blocked the escape route.

Casualties by Method of Control and Extinguishment

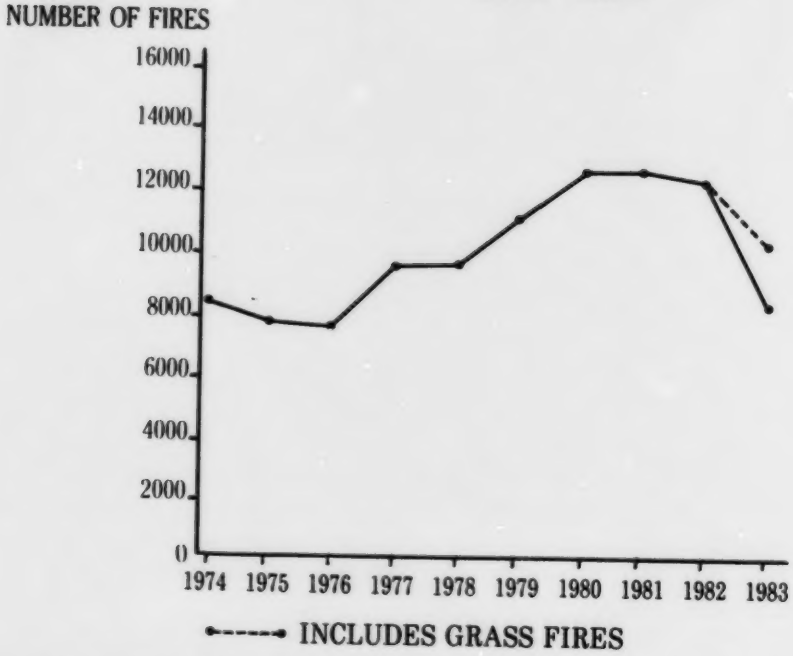
Method of Control and Extinguishment	Deaths	Injuries
Hand Fire Extinguisher	0	40
Standpipe System	1	17
Makeshift Firefighting Aid	0	42
Fire Department - Water	36	224
Fire Department - Other Than Water	0	3
Sprinkler System	0	1
Fixed System Other Than Sprinklers	0	9
Burned Out	8	35
Miscellaneous	15	67
Total	60	438

Commentary: While 11% of the residential fires were extinguished by hand fire extinguishers, there were no fatalities. Four and one half % of all fires burned out but 13% of the fatalities occurred in these fires.

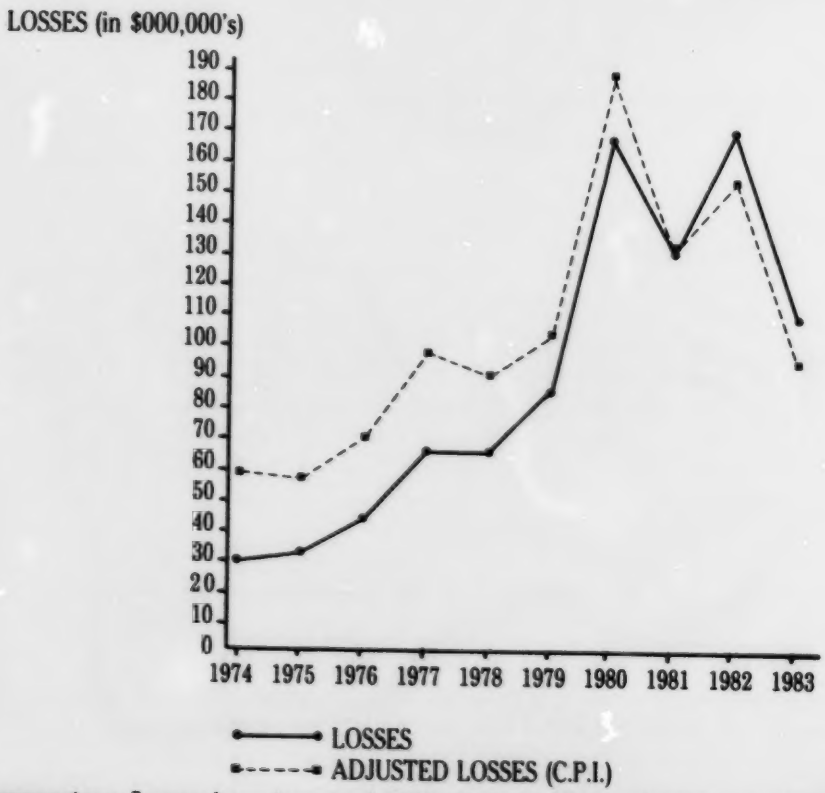
SECTION TWO

ALBERTA FIRE LOSS INFORMATION

FIRES AND LOSSES
1974 - 1983



Commentary: The number of fires has decreased 2% from 1974 to 1983 or increased 19% if grass fires are included in the 1983 figure.



Commentary: Losses have increased 255% between 1974 and 1983 and adjusted losses have increased 60%.

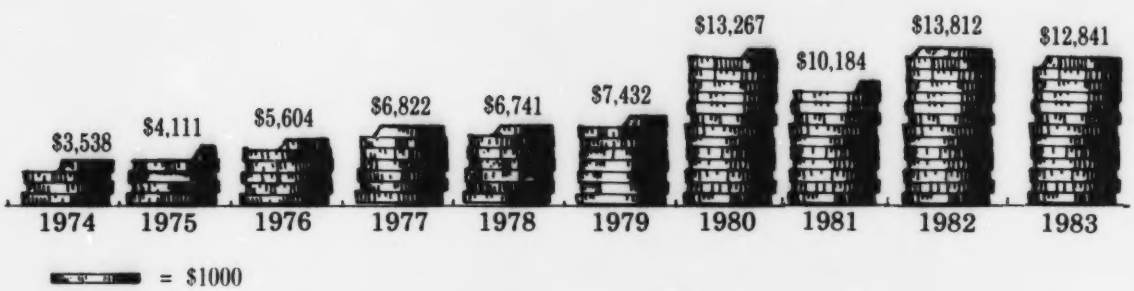
FIRE RATES AND PER CAPITA LOSSES
1974 - 1983

YEAR	POPULATION*	NO. OF FIRES	FIRE RATE**	LOSS ESTIMATE	LOSS PER CAPITA
1974	1,714,000	8,586	5.0	30,379,607	17.72
1975	1,789,000	7,934	4.4	32,617,954	18.23
1976	1,868,000	7,773	4.2	43,562,105	23.32
1977	1,900,000	9,607	5.1	65,544,029	34.50
1978	1,999,000	9,683	4.8	65,279,630	32.66
1979	2,064,000	11,159	5.4	82,942,773	40.19
1980	2,146,000	12,561	5.9	166,652,459	77.66
1981	2,278,000	12,656	5.6	128,896,436	56.58
1982	2,332,000	12,117	5.2	167,361,704	71.77
1983	2,293,000	8,413***	3.7	108,031,377	47.11
Average (1974-1983)		10,048		$ 89,126,807	

*As published by Alberta Quarterly Growth, 4th Quarterly, Alberta Bureau of Statistics.
**Number of fires per 1,000 population.
***This number does not include 1,797 grass fires where no losses occurred.

Commentary: From 1974 to 1983, Alberta's population increased 34%, the number of fires decreased 2%, the loss estimate increased 225%, and the loss per capita increased 169%. Between 1982 and 1983 there was a 31% decrease in the number of fires. If grass fires (which, starting in 1983, are classified separately) are included there is still a decrease of 16% in the number of fires between these two years.

AVERAGE LOSS PER FIRE
1974 - 1983



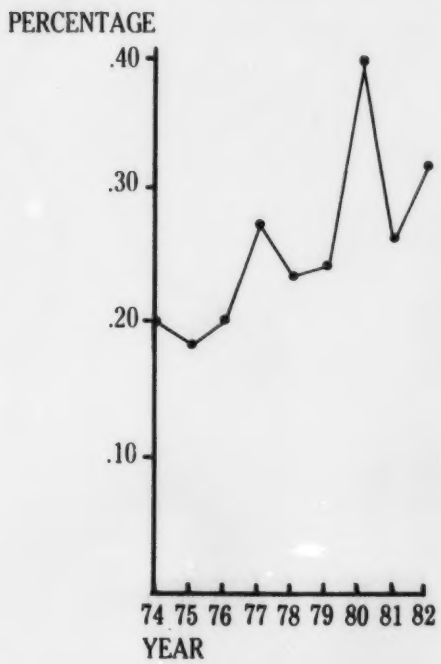
Commentary: There is a 263% increase in the average loss per fire from 1974 to 1983.

FIRE LOSSES RELATED TO ECONOMIC INDICES
1974 - 1983

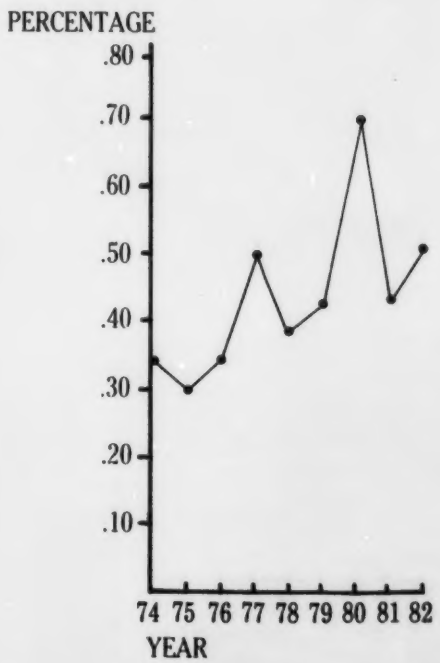
		GROSS DOMESTIC PRODUCT		PERSONAL INCOME	
Year	Fire Losses (in $000,000's)	Gross Domestic Product* (in $000,000's)	% of Gross Domestic Product	Personal Income* (in $000,000's)	% of Personal Income
1974	30.4	15,350	.20	$9,029	.34
1975	32.6	18,616	.18	11,015	.30
1976	43.6	21,588	.20	12,659	.34
1977	65.5	24,376	.27	14,434	.50
1978	65.3	27,900	.23	16,611	.39
1979	82.9	34,394	.24	19,866	.42
1980	166.7	41,663	.40	23,679	.70
1981	128.9	48,951	.26	29,679	.43
1982	167.4	52,157	.32	32,827	.51
1983	108.0	N/A	—	N/A	—

*Alberta Economic Accounts, 1982.

FIRE LOSSES AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT

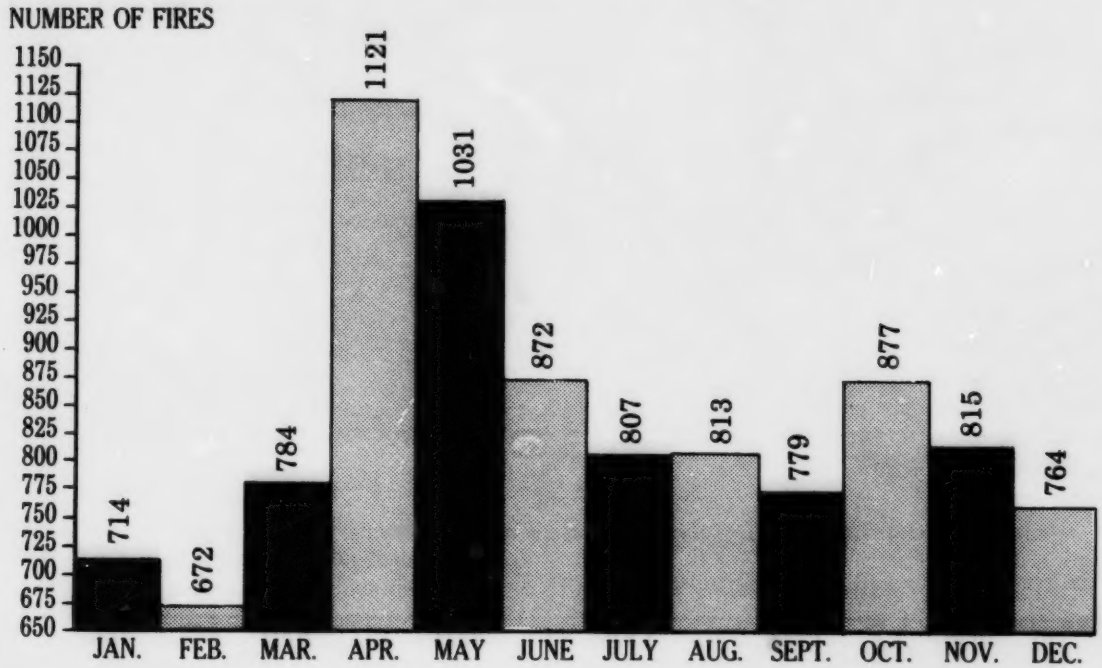


FIRE LOSSES AS A PERCENTAGE OF PERSONAL INCOME

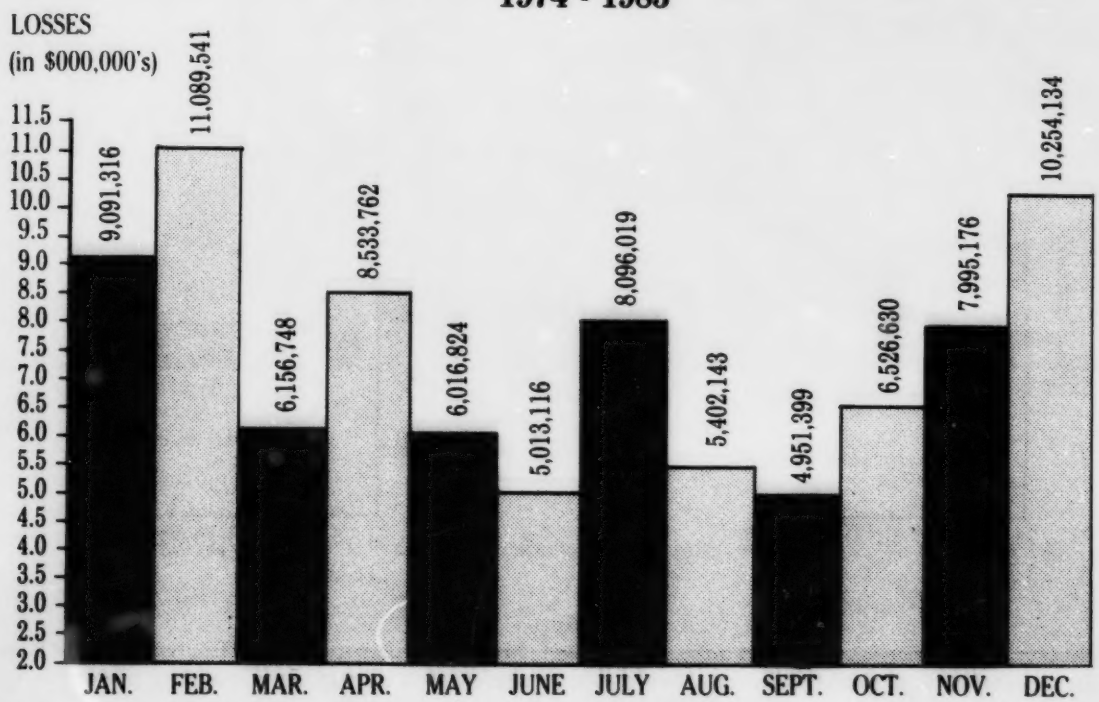


Commentary: As a percentage of gross domestic product, fire losses have increased 60% between 1974 and 1982. As a percentage of personal income, fire losses increased 50% during the same time period.

AVERAGE NUMBER OF FIRES BY MONTH
1974 - 1983

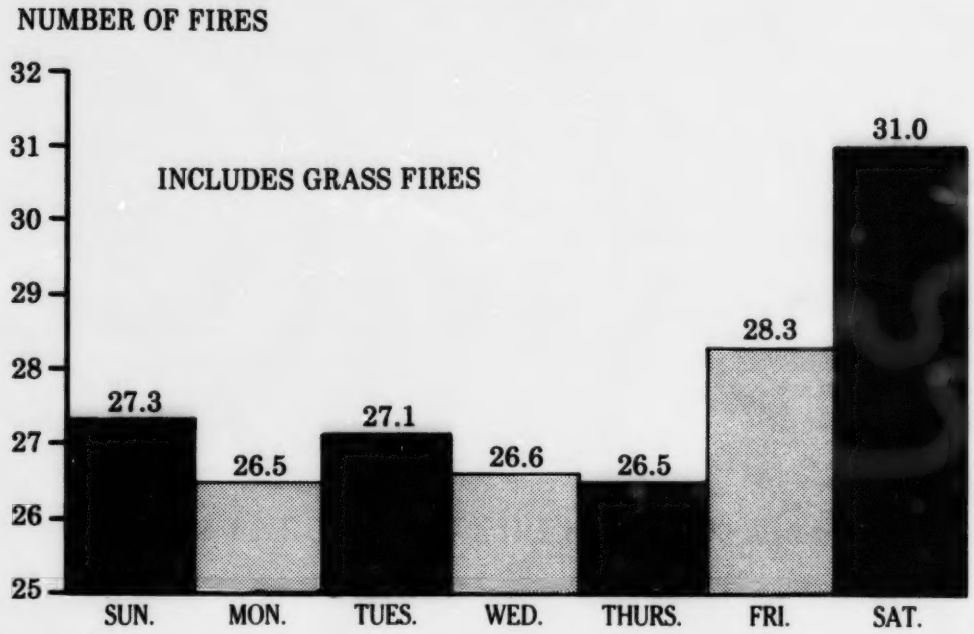


AVERAGE FIRE LOSS BY MONTH
1974 - 1983

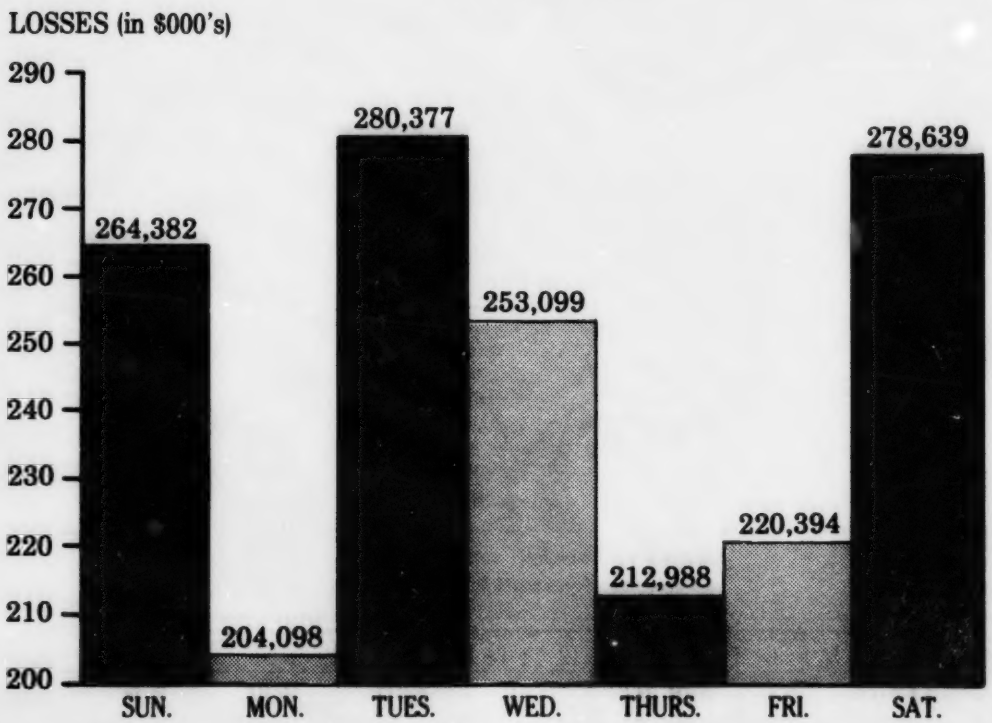


Commentary: While the average number of fires was greatest in the months of April and May, average losses were highest in January and February. The highest average loss per fire per month ($16,505) was in February.

AVERAGE NUMBER OF FIRES BY DAY OF WEEK
1974 - 1983

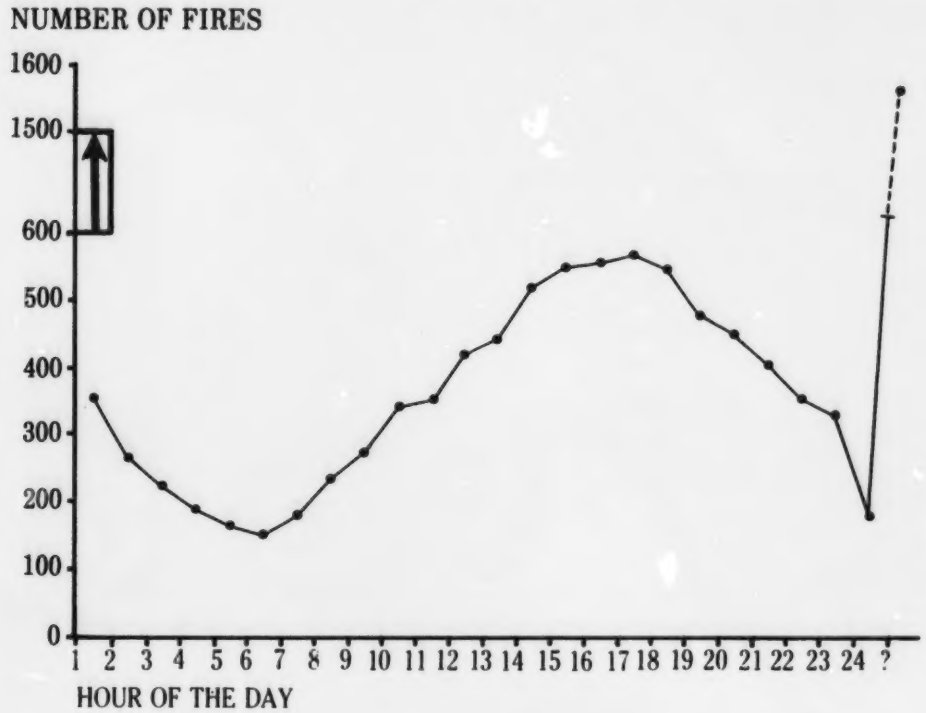


AVERAGE FIRE LOSS BY DAY OF WEEK
1974 - 1983

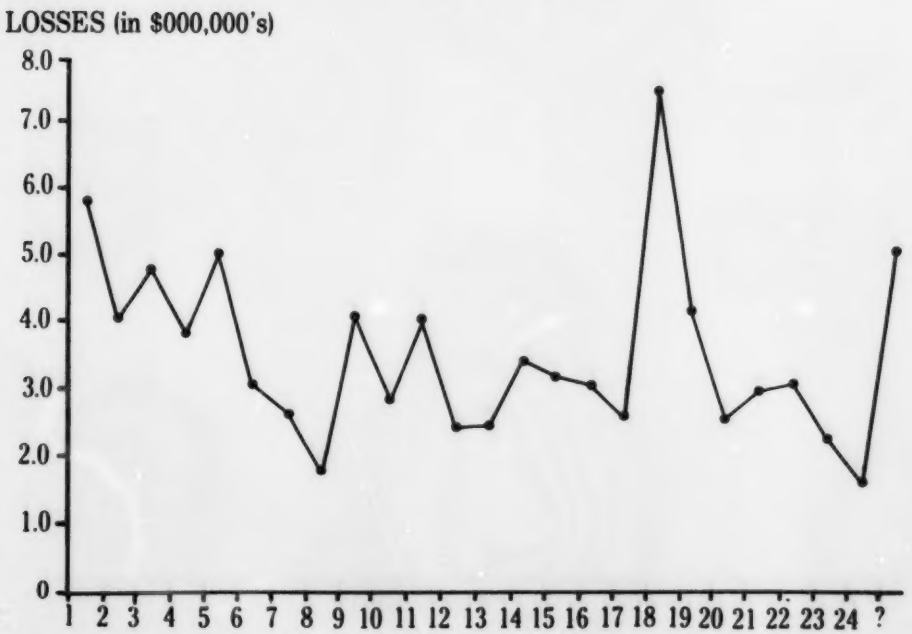


Commentary: From 1974 to 1983, the highest average number of fires on any day of the week occurred on Saturday. Tuesday and Saturday had higher losses than other days, with Monday having the lowest losses.

AVERAGE NUMBER OF FIRES BY HOUR OF DAY
1974 - 1983



AVERAGE FIRE LOSS BY HOUR OF DAY
1974 - 1983



Commentary: While the greatest number of fires occurred between the hours of 1400 (2:00 p.m.) and 2000 (8:00 p.m.). the greatest losses generally occurred during the early morning hours. The greatest average loss was sustained at 0500 (5:00 a.m.)

FIRES BY LOSS CATEGORY - 1983

LOSS CATEGORY	NUMBER	LOSSES	PERCENTAGE NUMBER	PERCENTAGE LOSSES
$1-99	1,178	36,946	14.0	less than .1
100-999	2,820	1,163,823	33.5	1.1
1,000-9,999	3,060	9,814,104	36.4	9.1
10,000-49,999	984	22,586,995	11.7	20.9
50,000-249,999	326	28,923,770	3.9	26.8
250,000-499,999	27	9,116,301	.3	8.4
500,000 and over	18	36,389,438	.2	33.7
TOTAL	8,413	$ 108,031,377	100.0	100.1

Commentary: Just over one-half of one % of the fires caused 55.8% of the 1983 losses.

1983 LARGE LOSS FIRES ($500,000 and over)

PROPERTY CLASS	DATE	LOCATION	OCCUPANCY	ACT OR OMISSION	LOSSES	INJURIES
ASSEMBLY	Aug. 7	ID #8	Restaurant	Incendiary	900,200	
RESIDENTIAL	Jan. 3	Peace River	Hotel	Unknown	954,775	
	Nov. 24	Nanton	Hotel	Unknown	506,488	1
MERCANTILE	April 4	Sundre	Supermarket	Electrical Short	552,360	
	June 3	Crowsnest Pass	Vehicle Repair Shop	Combustible Placed too Close to Heat	675,435	
	June 13	Calgary	Supermarket	Improper Storage	559,753	
INDUSTRIAL MANUFACTURING	Jan. 27	Red Deer	Grain Mill	Unknown	4,000,000	
	June 10	Edmonton	Bakery	Unknown	1,909,786	1
	June 16	Red Deer	Metal Products Manufacturing	Electrical Short	970,000	
	July 2	ID #18	Petroleum Refinery	Part Failure	15,500,000	
	July 24	Edmonton	Photographic Film Processing			2
	Nov. 8	Peace River	Industrial Manufacturing	Improper Storage	1,170,000	
	Nov. 15	MD #26	Metal Products Manufacturing			
STORAGE	May 14	Calgary	Aircraft Hangers	Unknown	4,438,878	3
SPECIAL	Jan. 1	ID #14	Construction Equipment	Part Failure	526,233	
	April 27	Calgary	Mobile and Fixed Crane	Unknown	500,000	
MISCELLANEOUS	March 9	SA #3	Animal Barn	Mechanical/Electrical Malfunction	1,023,731	
	April 9	Calgary	Laboratory	Improper Storage	515,000	

Commentary: There were no deaths in these large loss fires.

FIRES BY MAJOR PROPERTY CLASSIFICATIONS 1983

Property Classification	Number of Fires	% of Total	Losses	% of Total
ASSEMBLY				
Theatre, Studio, Auditorium	2	—	1,500	—
Amusement, Recreation Place	26	.3	232,900	.2
School, College, University	53	.6	738,272	.7
Church, Funeral Parlour	7	.1	174,450	.2
Clubs, Social, Sport	13	.2	466,328	.4
Museum, Art Gallery, Library	1	—	55,000	.1
Food or Beverage Establishment	62	.7	2,699,192	2.5
Passenger Terminal, Station	4	.1	4,800	—
Miscellaneous	1	—	17,000	—
Sub-Total	169	2.0	4,389,442	4.1
INSTITUTIONAL				
Prison, Jail, Reformatory	4	.1	7,887	—
Home for the Aged	19	.2	46,434	—
Child Care	5	.1	2,050	—
Hospital, Sanatorium, Clinic	22	.3	39,652	—
Miscellaneous	1	—	250	—
Sub-Total	51	.6	96,273	.1
RESIDENTIAL				
One and Two Family Dwellings	1,822	21.7	22,507,588	20.8
Apartment	554	6.6	3,422,761	3.2
Rooming, Boarding House	13	.2	49,325	.1
Hotel	53	.6	1,520,176	1.4
Motor Hotel	21	.2	182,900	.2
Dormitory	12	.1	141,716	.1
Mobile Home	322	3.8	4,238,014	3.9
Miscellaneous	5	.1	1,700	—
Sub-Total	2,802	33.3	32,064,180	29.7
BUSINESS AND PERSONAL SERVICE				
Office	37	.4	645,182	.6
Personal Service	4	—	72,033	.1
Electronic Equipment	1	—	200	—
Miscellaneous	0	—	0	—
Sub-Total	42	.5	717,415	.7
MERCANTILE				
Food, Beverage Sale	19	.2	1,542,865	1.4
Textile, Wearing Apparel Sale	8	.1	293,611	.3
Furniture, Appliance, Hardware Sales	3	—	141,535	.1
Books, Newspapers, Drugs, Specialties	10	.1	71,832	.1
Recreation, Hobby Supplies	0	—	0	—
Repair Shop, Laundry, Dry Cleaner	31	.4	738,631	.7
Motor Vehicles, Boats, Sales and Service	51	.6	2,862,964	2.7
Department, Variety Store	15	.2	167,160	.2
Miscellaneous	5	.1	38,557	0
Sub-Total	142	1.7	5,857,155	5.4

FIRES BY MAJOR PROPERTY CLASSIFICATIONS 1983 (Cont.)

Property Classification	Number of Fires	% of Total	Losses	% of Total
INDUSTRIAL MANUFACTURING PROPERTIES				
Chemicals, Petroleum, Paints, Plastics	34	.4	16,820,617	15.6
Wood, Furniture, Paper, Printing	23	.3	1,043,770	1.0
Metal, Metal Products, Electrical Equipment and Appliances	25	.3	2,130,442	2.0
Food Processing	16	.2	5,972,690	5.5
Beverage, Tobacco, Soap, Margarine	2	—	5,050	.1
Textiles	1	—	1,500	.1
Wearing Apparel, Footwear	1	—	11,900	.1
Vehicles and Related Equipment	4	—	1,998	.1
Miscellaneous	7	.1	2,549,153	2.4
Sub-Total	113	1.3	28,537,120	26.4
STORAGE PROPERTIES				
Agricultural Products	77	.9	1,866,952	1.7
Textiles, Fibres, Clothing	1	—	1	—
Processed Food, Beverage	2	—	1,500	—
Flammable Liquids, Gases, Petroleum Products	22	.3	194,636	.2
Wood, Furniture, Paper and Products	14	.2	439,332	.4
Chemicals, Plastics, Paints	1	—	200	—
Metal Products, Machinery, Electrical Appliance	6	.1	47,737	—
Vehicle	250	3.0	6,906,478	6.4
Miscellaneous	27	.3	1,063,311	1.0
Sub-Total	400	4.8	10,520,147	9.7
SPECIAL PROPERTY-TRANSPORTATION EQUIPMENT				
Outdoor Property	834	9.9	259,352	.2
Special Connecting Thoroughfares	2	—	100,001	.1
Under Construction/Demolition: Vacant	187	2.2	2,312,052	2.1
Watercraft	18	.2	76,561	.1
Rail Transport Vehicle and Equipment	18	.2	415,333	.4
Ground Transport Vehicle	2,696	32.0	8,350,483	7.7
Aircraft	3	—	15,250	—
Special Vehicles	318	3.8	6,295,004	5.8
Other Special Property	0	—	0	—
Sub-Total	4,076	48.4	17,824,036	16.5
MISCELLANEOUS PROPERTIES				
Laboratories	4	—	1,041,160	1.0
Farm Facilities	294	3.5	4,337,871	4.0
Miscellaneous Outbuildings	210	2.5	959,104	.9
Utility	65	.8	641,352	.6
Cement, Glass, Pottery Manufacturing	2	—	4,997	—
Mining, Quarrying	25	.3	980,637	.9
Communications	1	—	46,491	—
Nucleonics	0	—	0	—
Miscellaneous	17	.2	13,997	—
Sub-Total	618	7.6	8,025,609	7.4
TOTAL	8,413	100.2	108,031,377	100.0

Commmentary: While the number of fires was greatest in the 'special' classification (notably vehicles) with 48%, losses were greatest in residential properties with 30%.

PROPERTY LOSSES RELATED TO AREA OF ORIGIN 1983

Property Classification	MEANS OF EGRESS		ASSEMBLY AREA		FUNCTION AREA		STORAGE AREA	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	13	186,647	21	854,393	77	1,387,704	12	1,207,899
Institutional	2	501	6	16,745	35	45,536	4	576
Residential	96	1,021,407	416	5,031,782	1,505	13,743,514	96	1,465,604
Business	1	500	2	15,500	14	154,291	2	73,050
Mercantile	6	45,892	9	147,033	23	807,222	23	1,221,773
Manufacturing	1	202,861	0	—	26	539,269	14	16,979,402
Storage	4	398,913	0	—	3	144,565	206	7,015,512
Special	10	106,877	12	152,948	41	744,406	25	140,363
Miscellaneous	2	258,996	0	—	28	1,402,196	120	1,216,406
TOTAL	135	2,222,594	466	6,218,401	1,752	18,968,703	502	29,320,585

Property Classification	SERVICE FACILITIES		SERVICE AND EQUIPMENT AREA		STRUCTURAL AREA		VEHICLE AREA	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	5	3,251	8	17,177	29	599,720	0	—
Institutional	2	32,392	1	522	1	1	0	—
Residential	106	691,027	147	3,321,726	301	4,662,764	25	157,920
Business	3	9,327	8	323,124	11	140,623	0	—
Mercantile	1	500	46	3,225,662	23	243,529	3	153,018
Manufacturing	5	305,118	35	3,285,907	14	597,665	1	597
Storage	5	77,541	16	719,983	122	1,886,615	11	107,415
Special	1	5,900	12	509,593	66	501,578	3,037	14,982,569
Miscellaneous	8	240,850	40	1,468,508	196	1,874,153	7	8,838
TOTAL	136	1,365,906	313	12,872,202	763	10,506,643	3,084	15,410,357

Property Classification	OUTSIDE AREA		UNKNOWN		TOTAL	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	1	800	3	131,851	169	4,389,442
Institutional	0	—	0	—	51	96,273
Residential	56	493,756	54	1,474,680	2,802	32,064,180
Business	0	—	1	1,000	42	717,415
Mercantile	5	9,557	3	2,969	142	5,857,155
Manufacturing	13	1,974,890	4	4,651,411	113	28,537,120
Storage	31	149,932	2	19,671	400	10,520,147
Special	852	498,454	20	181,348	4,076	17,824,036
Miscellaneous	178	756,687	39	798,975	618	8,025,609
TOTAL	1,136	3,884,076	126	7,261,905	8,413	108,031,377

Commentary: For all types of occupancies, fires starting in storage areas caused an average $58,407 loss. The next highest average loss, $57,684, occurred when fires started in service and equipment areas. The average loss of a fire in a manufacturing facility was $252,541, however in this same occupancy, if the fire started in a storage room, the average loss was $1,212,814.

PROPERTY LOSSES RELATED TO ACT OR OMISSION 1983

Property Classification	INCENDIARY FIRES		MISUSE OF SOURCE		MISUSE OF MATERIAL		MECHANICAL, ELECTRICAL FAILURE	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	52	3,280,696	34	231,090	23	191,777	22	314,572
Institutional	9	27,300	14	2,267	10	9,886	8	47,642
Residential	191	2,989,017	632	5,542,354	594	3,891,174	464	5,929,711
Business	10	144,071	9	85,527	1	8	16	397,537
Mercantile	25	843,421	21	458,040	22	1,668,250	42	1,300,442
Manufacturing	10	1,914,605	19	217,543	9	1,459,732	33	18,020,453
Storage	83	1,723,762	84	832,127	43	755,030	63	1,051,156
Special	367	1,439,780	590	1,225,062	112	1,237,330	1,904	6,896,900
Miscellaneous	51	181,171	191	1,148,099	26	727,582	99	2,499,822
TOTAL	798	12,543,823	1,594	9,742,109	840	9,940,769	2,651	36,458,235

Property Classification	DESIGN DEFICIENCY		MISUSE OF EQUIPMENT		HUMAN FAILING		VEHICLE ACCIDENT	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	2	4,950	1	55,563	21	58,747	0	—
Institutional	1	300	1	100	7	8,428	0	—
Residential	130	1,832,721	9	77,790	496	2,776,294	2	10,959
Business	2	3,210	0	—	3	5,062	0	—
Mercantile	5	28,060	1	328,080	9	338,319	0	—
Manufacturing	10	89,400	1	13,035	6	141,644	1	26,370
Storage	13	59,823	2	1,040	26	95,272	1	7,077
Special	19	392,390	10	81,798	188	380,137	56	573,674
Miscellaneous	12	408,686	5	52,041	32	350,967	1	100
TOTAL	194	2,819,540	30	609,447	788	4,154,870	61	618,180

Property Classification	MISCELLANEOUS		UNKNOWN		TOTAL	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	4	4	10	252,043	169	4,389,442
Institutional	0	—	1	350	51	96,273
Residential	53	683,039	231	8,331,121	2,802	32,064,180
Business	0	—	1	82,000	42	717,415
Mercantile	2	4,000	15	888,543	142	5,857,155
Manufacturing	7	22,069	17	6,632,269	113	28,537,120
Storage	16	151,953	69	5,842,907	400	10,520,147
Special	131	522,840	699	5,074,125	4,076	17,824,036
Miscellaneous	64	420,546	137	2,236,595	618	8,025,609
TOTAL	277	1,804,451	1,180	29,339,953	8,413	108,031,377

Commentary: Mechanical and electrical failures caused 32% of all fires and 34% of the losses. Misuse of source of ignition caused 19% of all fires and 9% of all property losses. The average loss in an incendiary fire was $15,719.

In residential properties, incendiarism resulted in an average loss per fire of $15,649. The next highest average loss, $14,097, occurred in fires resulting from a design deficiency.

PROPERTY LOSSES RELATED TO SOURCE OF IGNITION 1983

Property Classification	COOKING EQUIPMENT		HEATING EQUIPMENT		APPLIANCES AND EQUIPMENT		ELECTRICAL DISTRIBUTION EQUIPMENT	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	31	480,222	10	33,318	2	40,284	10	82,795
Institutional	13	7,961	2	400	4	14,046	3	36,074
Residential	864	4,155,271	379	4,661,759	146	930,400	163	3,298,094
Business	3	14,370	4	4,010	3	80,200	8	305,287
Mercantile	2	85,340	25	2,290,620	10	40,085	16	160,034
Manufacturing	2	25,590	12	214,257	4	303,853	7	1,329,102
Storage	7	18,658	61	1,068,020	1	5,000	30	248,635
Special	26	79,819	45	591,047	42	155,576	812	2,492,427
Miscellaneous	7	162,072	33	890,633	15	94,006	45	246,844
TOTAL	955	5,029,303	571	9,754,064	227	1,663,450	1,094	8,199,292

Property Classification	OTHER ELECTRICAL EQUIPMENT		SMOKER'S MATERIAL AND "OPEN" FLAMES		EXPOSURE		MISCELLANEOUS	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	8	54,000	79	2,662,602	5	31,072	5	56,463
Institutional	2	722	26	29,840	0	—	0	—
Residential	51	697,080	806	7,268,877	102	891,454	45	806,326
Business	4	9,277	12	166,021	6	103,600	1	600
Mercantile	7	627,386	36	1,106,436	11	225,507	11	385,433
Manufacturing	4	278,859	20	436,023	7	35,886	34	17,573,071
Storage	10	139,529	81	1,241,213	98	1,790,816	22	234,113
Special	21	217,564	798	1,701,515	300	1,462,454	1,164	4,581,029
Miscellaneous	28	1,915,132	122	978,434	183	721,623	55	806,115
TOTAL	135	3,939,549	1,980	15,590,961	712	5,262,412	1,337	24,443,150

Property Classification	UNKNOWN		TOTAL	
	Number of Fires	Losses	Number of Fires	Losses
Assembly	19	948,686	169	4,389,442
Institutional	1	7,230	51	96,273
Residential	246	9,354,919	2,802	32,064,180
Business	1	34,050	42	717,415
Mercantile	24	936,314	142	5,857,155
Manufacturing	23	8,340,479	113	28,537,120
Storage	90	5,774,163	400	10,520,147
Special	868	6,542,605	4,076	17,824,036
Miscellaneous	130	2,210,750	618	8,025,609
TOTAL	1,402	34,149,196	8,413	108,031,377

Commentary: Smokers' materials and open flames were the source of ignition for 24% of the fires and 14% of the losses. Where a source of ignition was identified, the highest average loss of $29,182 was in fires where the source was other electrical equipment. The next highest average loss, $17,082, was in fires where smokers' material and open flames were the source of ignition. In residential properties, the highest average loss, $20,234, was in fires where the source of ignition was electrical distribution equipment.

PROPERTY LOSSES RELATED TO FUEL OR ENERGY 1983

Property Classification	COAL OR WOOD ETC.		FUEL OIL		GASOLINE		NATURAL GAS OR OTHER FUEL GASES	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	2	135,482	1	1,250	1	150	25	154,690
Institutional	2	750	0	—	0	—	4	176
Residential	270	2,408,553	24	263,008	12	154,008	268	3,400,893
Business	1	1,000	0	—	0	—	3	3,310
Mercantile	1	933	1	123,768	4	232,875	34	2,073,039
Manufacturing	6	94,235	5	1,237,060	1	170,000	31	666,153
Storage	18	56,227	6	138,868	10	289,173	60	1,272,490
Special	33	13,488	38	1,083,641	1,016	2,740,601	136	952,411
Miscellaneous	10	57,278	8	505,217	30	120,559	40	1,036,767
TOTAL	343	2,767,946	83	3,352,812	1,074	3,707,366	601	9,559,92[a]

Property Classification	SMOKER'S MATERIAL		ELECTRICITY		LIGHTNING		EXPOSURE	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	73	2,524,254	33	526,581	0	—	5	31,072
Institutional	24	29,339	20	58,778	0	—	0	—
Residential	674	6,140,183	1,075	8,142,672	21	162,497	96	880,069
Business	10	153,733	18	409,634	0	—	5	102,600
Mercantile	25	777,904	33	893,130	1	2,000	11	225,507
Manufacturing	3	191,071	17	1,710,398	0	—	7	35,886
Storage	51	606,504	49	472,270	1	600	98	1,790,816
Special	694	1,320,724	881	2,811,249	16	97,083	298	1,464,431
Miscellaneous	88	684,453	82	2,475,603	14	216,936	182	720,273
TOTAL	1,642	12,428,165	2,208	17,500,315	53	479,116	702	5,250,654

Property Classification	UNCLASSIFIED		UNKNOWN		TOTAL	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	7	65,061	22	950,902	169	4,389,442
Institutional	0	—	1	7,230	51	96,273
Residential	92	1,080,796	270	9,431,501	2,802	32,064,180
Business	2	6,888	3	40,250	42	717,415
Mercantile	2	559,903	30	968,096	142	5,857,155
Manufacturing	14	15,958,488	29	8,473,829	113	28,537,120
Storage	16	110,036	91	5,783,163	400	10,520,147
Special	78	613,705	886	6,726,703	4,076	17,824,036
Miscellaneous	23	90,806	141	2,117,717	618	8,025,609
TOTAL	234	18,485,683	1,473	34,499,391	8,413	108,031,377

Commentary: Electricity was the most commonly identified fuel or energy resulting in 26% of the fires and causing the greatest losses (16%). The average loss in a fire initially fueled by fuel oil is in excess of $40,395.

PROPERTY LOSSES RELATED TO MATERIAL FIRST IGNITED 1983

Property Classification	STRUCTURAL COMPONENTS		FURNITURE, FURNISHINGS		CLOTHING, TEXTILES		WOOD, PAPER PRODUCTS	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	13	110,956	9	60,743	6	473	50	2,082,791
Institutional	3	252	16	41,996	2	35	11	3,545
Residential	446	6,206,612	489	4,720,916	136	913,812	261	2,246,535
Business	7	119,437	0	—	1	500	8	68,188
Mercantile	21	853,489	4	3,470	5	50,241	17	300,535
Manufacturing	19	448,561	1	3,384	2	216,945	20	229,085
Storage	96	1,779,616	5	7,536	2	6,920	38	688,180
Special	71	652,149	98	328,695	56	80,970	203	1,000,298
Miscellaneous	122	1,008,133	4	12,038	3	18,500	48	54,825
TOTAL	798	11,179,205	626	5,178,778	213	1,288,406	656	6,673,982

Property Classification	FLAMMABLE LIQUIDS		FLAMMABLE GASES		CHEMICALS		AGRICULTURAL PRODUCTS	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	34	1,166,068	5	67,051	10	5,060	1	400
Institutional	10	5,643	0	—	1	325	0	—
Residential	649	4,566,781	68	402,467	55	259,068	34	262,926
Business	4	51,383	0	—	4	4,770	0	—
Mercantile	31	1,855,452	5	480,647	2	2,249	1	100
Manufacturing	21	17,559,123	7	290,217	3	1,666	8	1,912,911
Storage	70	1,096,068	16	238,944	8	20,961	32	147,350
Special	1,224	4,554,935	66	546,896	78	285,299	231	878,946
Miscellaneous	39	1 020,771	25	986,584	3	150,050	179	903,647
TOTAL	2,082	31,876,224	192	3,012,806	164	729,448	486	4,106,280

Property Classification	MISCELLANEOUS		UNKNOWN		TOTAL	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	27	188,005	14	707,895	169	4,389,442
Institutional	7	37,247	1	7,230	51	96,273
Residential	368	2,896,669	296	9,588,394	2,802	32,064,180
Business	15	421,137	3	52,000	42	717,415
Mercantile	31	263,500	25	2,047,462	142	5,857,155
Manufacturing	11	1,647,346	21	6,227,882	113	28,537,120
Storage	42	317,406	91	6,217,166	400	10,520,147
Special	1,231	2,080,878	818	7,414,970	4,076	17,824,036
Miscellaneous	56	366,822	139	3,504,239	618	8,025,609
TOTAL	1,788	8,219,010	1,408	35,767,238	8,413	108,031,377

Commentary: When identified, the materials most commonly first ignited were flammable liquids (25%). These fires resulted in 30% of the losses.

PROPERTY LOSSES RELATED TO INITIAL DETECTION 1983

	SMOKE ALARM/ DETECTOR DEVICE		HEAT ALARM/ DETECTOR DEVICE		AUTOMATIC SYSTEMS		VISUAL SIGHTING	
Property Classification	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	9	105,460	3	114,325	9	215,723	144	3,948,218
Institutional	16	20,837	4	14,866	1	450	27	59,844
Residential	281	3,049,397	14	11,750	36	21,128	2,429	28,457,968
Business	2	8,427	1	82,000	4	22,395	33	524,543
Mercantile	1	150	3	40,250	6	21,391	129	5,733,566
Manufacturing	0	0	2	1,158,179	5	5,381	102	27,337,701
Storage	3	7,961	1	130,000	7	60,315	382	9,876,233
Special	0	0	0	0	4	13,100	3,998	17,590,407
Miscellaneous	0	0	2	7,000	2	80,500	605	7,745,548
TOTAL	312	3,192,232	30	1,558,370	74	440,383	7,849	101,274,028

	UNCLASSIFIED OR UNKNOWN		TOTAL	
Property Classification	Number of Fires	Losses	Number of Fires	Losses
Assembly	4	5,716	169	4,389,442
Institutional	3	276	51	96,273
Residential	42	523,937	2,802	32,064,180
Business	2	80,050	42	717,415
Mercantile	3	61,798	142	5,857,155
Manufacturing	4	35,859	113	28,537,120
Storage	7	445,638	400	10,520,147
Special	74	220,529	4,076	17,824,036
Miscellaneous	9	192,561	618	8,025,609
TOTAL	148	1,566,364	8,413	108,031,377

Commentary: The average loss of a fire first detected by visual sighting was $12,903. The average loss of a fire first detected by a smoke alarm/detector was $10,232.

FIRES BY METHOD OF FIRE CONTROL AND EXTINGUISHMENT 1983

Method of Fire Control and Extinguishment	Number of Fires	Losses
HAND FIRE EXTINGUISHER		
Water pump tank	262	737,712
Water pressurized	77	833,262
Water soda-acid	3	5,062
Foam	8	84,948
Vapourizing liquid/Halon	—	—
CO_2	49	74,843
Dry chemical	482	1,066,364
Multi-purpose dry chemical	51	164,263
Hand fire extinguisher - unclassified	35	60,004
Sub-Total	967	3,026,458
STANDPIPE SYSTEM		
Small hose, 38 mm nominal size, straight stream nozzle	42	139,131
Small hose, 38 mm nominal size, combination nozzle	268	1,855,819
Large hose, 65 mm nominal size, straight stream nozzle	2	75,407
Large hose, 65 mm nominal size, combination nozzle	10	95,546
Continuous flow hose, less than 38 mm nominal size, straight stream nozzle	1	640
Continuous flow hose, less than 38 mm nominal size, combination nozzle	4	3,451
Standpipe system - unclassified	6	56,074
Sub-Total	333	2,226,068
"MAKESHIFT" FIRE FIGHTING AID		
Garden hose	136	191,001
Water bucket	78	101,230
Small water container	145	218,896
Sand bucket	3	4,693
Dry chemical and scoop	3	1,450
Baking soda	20	17,739
Smothering by covering	86	64,504
Snow	42	52,453
"Makeshift" fire fighting aid - unclassified	50	145,514
Sub-Total	563	797,480
FIRE DEPARTMENT — WATER		
Booster hose 25 mm or less	324	710,858
38 mm hose, 1 hoseline	1,450	6,216,703
38 mm hose, 2 or more hoselines	670	16,062,786
65 mm hose, 1 hoseline	21	689,391
65 mm hose, 2 or more hoselines	36	1,652,408
77 mm or larger hose, 1 or more hoselines	2	37,647
Combinations of 38 mm, 65 mm, 77 mm or larger hoselines	299	28,980,103
Portable water deluge set	7	137,848
Fire department - water - unclassified	77	2,899,106
Sub-Total	2,887	57,388,350

FIRES BY METHOD OF FIRE CONTROL AND EXTINGUISHMENT 1983 (Cont.)

Method of Fire Control and Extinguishment	Number of Fires	Losses
FIRE DEPARTMENT — OTHER THAN WATER		
Crash-fire foam vehicle, using monitor	0	—
Crash-fire foam vehicle, using handlines	0	—
Pumper, foam handlines only, via educator	21	1,049,882
Vehicle, combination, foam-dry chemical	1	9,815
Vehicle, dry chemical, under 450 kg	5	7,350
Vehicle, dry chemical, 450 kg and over	0	—
Fire department - other than water - unclassified	15	264,741
Sub-Total	42	1,331,788
SPRINKLER SYSTEM		
Wet pipe system, central station supervised, standard watchman service, or alarm connection to fire department	22	40,655
Wet pipe system, local alarm only	10	68,584
Dry pipe system, central station supervised, standard watchman service, or alarm connection to fire department	5	39,800
Dry pipe system, local alarm only	1	50
Pre-action system, central station supervised, standard watchman service, or alarm connection to fire department	0	—
Pre-action system, local alarm only	0	—
Engineered systems	0	—
Sprinkler system - unclassified	2	150
Sub-Total	40	149,239
FIXED SYSTEM OTHER THAN SPRINKLERS		
Carbon dioxide system	1	1,500
Dry chemical system	2	33,334
Halon system	0	—
Conventional (protein) foam system	0	—
High expansion foam system	0	—
Foam-water system	1	32,475
Water spray system	0	—
Fixed system other than sprinklers - unclassified	1	1,800
Sub-Total	5	69,109
BURNED OUT		
Completely burned out before arrival of fire department	173	759,367
Incapable of control by fire department on arrival	24	2,228,936
Burned out - unclassified	181	1,484,310
Sub-Total	378	4,472,613
MISCELLANEOUS		
Portable high expansion foam generator	0	—
CO2 handhose system, 25 kg or more	0	—
Dry chemical system, handhose system, 25 kg or more	0	—
Miscellaneous - unclassified	77	161,133
Miscellaneous - cannot be determined	3,121	38,409,139
Sub-Total	3,198	38,570,272
TOTAL	8,413	108,031,377

Commentary: Over 11% of all fires were extinguished by a hand fire extinguisher. Another 7% were extinguished by makeshift fire fighting aids.

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1983

MUNICIPALITY	1983 POP.	1983 FIRE COUNT	1983 AMOUNT OF LOSS	1983 FIRE RATE	1983 PER CAPITA LOSS	10 YEAR TOTAL FIRE COUNT	10 YEAR TOTAL AMOUNT OF LOSS	10 YEAR AVERAGE FIRE RATE	10 YEAR AVERAGE PER CAPITA LOSS
CNTY 1. GRANDE PRAIRIE	12,078	86	1,767,763	7.1	146.36	1,042	10,304,743	8.6	85.31
BEAVERLODGE	1,937	6	132,805	3.0	68.56	52	467,389	2.6	24.12
HYTHE	681	6	70,230	8.8	103.12	24	199,174	3.5	29.24
SEXSMITH	1,184	4	950	3.3	.80	60	602,297	5.0	50.86
WEMBLEY	1,209	6	70,675	4.9	58.45	26	309,579	2.1	25.60
TOTAL	17,089	108	2,042,423	6.3	119.51	1,204	11,883,182	7.0	69.53
CNTY 2. VULCAN	3,715	18	213,990	4.8	57.60	175	1,551,202	4.7	41.75
VULCAN	1,507	1	2,000	.6	1.32	29	473,366	1.9	31.41
ARROWWOOD	165	–	–	–	–	4	1,609	2.4	.97
CARMANGAY	281	1	2,100	3.5	7.47	10	34,444	3.5	12.25
CHAMPION	380	1	33,156	2.6	87.25	8	49,950	2.1	13.14
LOMOND	204	1	2,869	4.9	14.06	6	26,189	2.9	12.83
MILO	117	–	–	–	–	6	14,365	5.1	12.27
TOTAL	6,369	22	254,115	3.4	39.89	238	2,151,125	3.7	33.77
CNTY 3. PONOKA	7,536	38	282,039	5.0	37.42	442	3,041,837	5.8	40.36
PONOKA	5,221	18	32,504	3.4	6.22	159	2,764,362	3.0	52.94
RIMBEY	1,848	4	147,149	2.1	79.62	52	260,736	2.8	14.10
TOTAL	14,605	60	461,692	4.1	31.61	653	6,066,935	4.4	41.54
CNTY 4. NEWELL	6,199	27	312,689	4.3	50.44	400	44,214,265	6.4	713.24
BROOKS	9,421	27	521,414	2.8	55.34	216	2,518,726	2.2	26.73
BASSANO	1,200	3	32,604	2.5	27.17	32	197,856	2.6	16.48
DUCHESS	429	–	–	–	–	13	106,943	3.0	24.92
ROSEMARY	328	–	–	–	–	6	9,339	1.8	2.84
TILLEY	362	1	45,216	2.7	124.90	9	246,833	2.4	68.18
TOTAL	17,939	58	911,923	3.2	50.83	676	47,293,962	3.7	263.63
CNTY 5. WARNER	3,460	16	75,673	4.6	21.87	182	1,255,239	5.2	36.27
WARNER	482	1	600	2.0	1.24	24	241,829	4.9	50.17
MILK RIVER	894	2	39,044	2.2	43.67	30	195,382	3.3	21.85
RAYMOND	2,837	4	25,788	1.4	9.08	82	542,662	2.8	19.12
COUTTS	400	3	6,129	7.5	15.32	17	170,299	4.2	42.57
STIRLING	688	4	3,844	5.8	5.58	19	132,661	2.7	19.28
TOTAL	8,761	30	151,078	3.4	17.24	354	2,538,072	4.0	28.97
CNTY 6. STETTLER	5,092	20	149,034	3.9	29.26	323	4,908,109	6.3	96.38
STETTLER	5,136	9	76,621	1.7	14.91	194	1,092,354	3.7	21.26
BIG VALLEY	360	2	11,737	5.5	32.60	14	65,114	3.8	18.08
BOTHA	172	1	350	5.8	2.03	8	27,340	4.6	15.89
DONALDA	266	–	–	–	–	5	40,445	1.8	15.20
GADSBY	56	–	–	–	–	4	45,603	7.1	81.43
ROCHON SANDS	51	–	–	–	–	5	13,207	9.8	25.89
WHITE SANDS	2	–	–	–	–	–	–	–	–
TOTAL	11,135	32	237,742	2.8	21.35	553	6,192,172	4.9	55.60
CNTY 7. THORHILD	3,323	22	237,907	6.6	71.59	141	1,830,124	4.2	55.07
THORHILD	566	–	–	–	–	12	65,052	2.1	11.49
RADWAY	194	1	4,500	5.1	23.19	3	6,830	1.5	3.52
TOTAL	4,083	23	242,407	5.6	59.36	156	1,902,006	3.8	46.58
CNTY 8. FORTY MILE	3,451	25	180,247	7.2	52.23	149	1,035,571	4.3	30.00
FOREMOST	576	3	34,345	5.2	59.62	36	254,262	6.2	44.14
BOW ISLAND	1,499	4	38,367	2.6	25.59	38	212,687	2.5	14.18
BURDETT	250	1	5,000	4.0	20.00	5	138,153	2.0	55.26
TOTAL	5,775	33	257,959	5.7	44.66	228	1,640,673	3.9	28.40
CNTY 9. BEAVER	5,347	30	216,707	5.6	40.52	266	1,672,524	4.9	31.27
RYLEY	544	–	–	–	–	3	1,720	.5	.31
TOFIELD	1,560	2	1,407	1.2	.90	34	376,807	2.1	24.15
VIKING	1,238	2	4,095	1.6	3.30	35	320,516	2.8	25.88
HOLDEN	430	–	–	–	–	4	2,838	.9	.66
TOTAL	9,119	34	222,209	3.7	24.36	342	2,374,405	3.7	26.03
CNTY 10. WETASKIWIN	9,026	42	304,203	4.6	33.70	442	3,474,590	4.8	38.49
CRYSTAL SPRINGS	44	1	35,600	22.7	809.09	1	35,600	2.2	80.90
MA-ME-O BEACH	82	1	134,482	12.1	1,640.02	17	368,957	20.7	449.94
MILLET	1,087	1	657	.9	.60	24	75,621	2.2	6.95
SILVER BEACH	27	–	–	–	–	–	–	–	–
GRANDVIEW	38	–	–	–	–	1	332	2.6	.87
ARGENTIA BEACH	3	3	347,079	1,000.0	115,693.00	16	560,119	533.3	18,670.63
POPLAR BAY	38	1	200	26.3	5.26	1	200	2.6	.52
TOTAL	10,345	49	822,221	4.7	79.48	502	4,515,419	4.8	43.64

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1983 (Cont.)

	1983					10 YEAR TOTAL		10 YEAR AVERAGE	
MUNICIPALITY	POP.	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS
CNTY 11, BARRHEAD	5,517	16	331,228	2.9	60.03	158	2,828,654	2.8	51.27
BARRHEAD	3,736	7	52,303	1.8	13.99	77	637,399	2.0	17.06
TOTAL	9,253	23	383,531	2.4	41.44	235	3,466,053	2.5	37.45
CNTY 12, ATHABASCA	6,145	11	139,029	1.7	22.62	274	2,264,938	4.4	36.85
ATHABASCA	1,862	2	5,195	1.0	2.79	60	2,806,759	3.2	150.73
BOYLE	679	1	25,000	1.4	36.81	17	99,400	2.5	14.63
ISLAND LAKE	43	–	–	–	–	–	–	–	–
SUNSET BEACH	24	–	–	–	–	1	2,000	4.1	8.33
MEWATHA BEACH	27	–	–	–	–	1	1	3.7	–
TOTAL	8,780	14	169,224	1.5	19.27	353	5,173,098	4.0	58.91
CNTY 13, SMOKY LAKE	2,910	17	263,498	5.8	90.54	175	1,792,649	6.0	61.60
SMOKY LAKE	1,165	1	5,500	.8	4.72	29	117,311	2.4	10.06
VILNA	345	2	93,447	5.7	270.86	12	110,001	3.4	31.88
WARSPITE	96	–	–	–	–	2	8,023	2.0	8.35
WASKATENAU	281	–	–	–	–	3	2,529	1.0	.90
TOTAL	4,797	20	362,445	4.1	75.55	221	2,030,513	4.6	42.32
CNTY 14, LACOMBE	8,783	80	1,322,874	9.1	150.61	637	6,737,165	7.2	76.70
LACOMBE	5,954	14	50,897	2.3	8.54	161	1,411,212	2.7	23.70
ALIX	837	1	843	1.1	1.00	17	1,776,959	2.0	212.30
BENTLEY	825	2	18,050	2.4	21.87	30	590,843	3.6	71.61
BLACKFALDS	1,488	4	5,950	2.6	3.99	38	30,879	2.5	2.07
CLIVE	364	1	631	2.7	1.73	13	32,391	3.5	8.89
ECKVILLE	842	2	3,050	2.3	3.62	31	168,836	3.6	20.05
GULL LAKE	80	1	25	12.5	.31	15	198,869	18.7	248.58
MIRROR	552	2	45,050	3.6	81.61	22	190,268	3.9	34.46
BIRCHCLIFF	43	–	–	–	–	1	1,100	2.3	2.55
HALF MOON BAY	34	–	–	–	–	–	–	–	–
TOTAL	19,802	107	1,447,370	5.4	73.09	965	11,138,522	4.8	56.24
CNTY 16, WHEATLAND	5,513	46	199,294	8.3	36.14	450	4,302,555	8.1	78.04
STRATHMORE	3,436	16	25,764	4.6	7.49	89	1,412,985	2.5	41.12
GLEICHEN	381	–	–	–	–	12	67,627	3.1	17.74
CLUNY	111	1	10	9.0	.09	16	17,657	14.4	15.90
HUSSAR	179	2	8,300	11.1	46.36	11	1,802,937	6.1	1,007.22
ROCKYFORD	325	1	8,866	3.0	27.28	13	472,524	4.0	145.39
STANDARD	379	2	26,189	5.2	69.10	9	36,163	2.3	9.54
TOTAL	10,324	68	268,423	6.5	25.99	600	8,112,448	5.8	78.57
CNTY 17, MOUNTAIN VIEW	8,832	57	613,364	6.4	69.44	577	6,637,105	6.5	75.14
DIDSBURY	3,235	15	50,482	4.6	15.60	106	873,963	3.2	27.01
OLDS	4,888	9	23,647	1.8	4.83	139	4,097,623	2.8	83.83
SUNDRE	1,750	7	569,763	4.0	325.57	55	792,329	3.1	45.27
CARSTAIRS	1,725	5	7,639	2.8	4.42	52	362,328	3.0	21.00
CREMONA	410	1	1,600	2.4	3.90	18	133,303	4.3	32.51
TOTAL	20,840	94	1,266,495	4.5	60.77	947	12,896,651	4.5	61.88
CNTY 18, PAINTEARTH	2,495	10	108,220	4.0	43.37	150	1,051,031	6.0	42.12
CASTOR	1,123	4	12,625	3.5	11.24	25	84,294	2.2	7.50
CORONATION	1,268	7	7,356	5.5	5.80	58	2,063,386	4.5	162.72
HALKIRK	156	–	–	–	–	6	2,776	3.8	1.77
TOTAL	5,042	21	128,201	4.1	25.42	239	3,201,487	4.7	63.49
CNTY 19, ST. PAUL	6,101	35	297,438	5.7	48.75	384	3,070,331	6.2	50.32
ST. PAUL	4,963	9	33,091	1.8	6.66	165	3,102,877	3.3	62.52
ELK POINT	1,057	3	12,240	2.8	11.57	28	181,671	2.6	17.18
TOTAL	12,121	47	342,769	3.8	28.27	577	6,354,879	4.7	52.42
CNTY 20, STRATHCONA	48,024	184	1,926,066	3.8	40.10	2,587	18,733,442	5.3	39.00
FT. SASKATCHEWAN	12,474	16	64,315	1.2	5.15	271	9,288,690	2.1	74.46
TOTAL	60,498	200	1,990,381	3.3	32.89	2,858	28,022,132	4.7	46.31
CNTY 21, TWO HILLS	3,380	22	37,768	6.5	11.17	173	1,060,918	5.1	31.38
TWO HILLS	1,330	1	283	.7	.21	17	24,173	1.2	1.81
DERWENT	142	–	–	–	–	2	13,061	1.4	9.19
MYRNAM	397	1	1,500	2.5	3.77	10	61,898	2.5	15.59
WILLINGDON	376	1	2,545	2.6	6.76	12	79,684	3.1	21.19
HAIRY HILL	72	–	–	–	–	–	–	–	–
TOTAL	5,697	25	42,096	4.3	7.38	214	1,239,734	3.7	21.76
CNTY 22, CAMROSE	7,564	54	462,720	7.1	61.17	467	3,018,569	6.1	39.90
BASHAW	875	4	10,048	4.5	11.48	23	123,787	2.6	14.14
BAWLF	351	1	1,500	2.8	4.27	18	1,642,629	5.1	467.98

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1983 (Cont.)

MUNICIPALITY	1983 POP.	1983 FIRE COUNT	1983 AMOUNT OF LOSS	1983 FIRE RATE	1983 PER CAPITA LOSS	10 YEAR TOTAL FIRE COUNT	10 YEAR TOTAL OF LOSS	10 YEAR AVERAGE FIRE RATE	10 YEAR AVERAGE PER CAPITA LOSS
CNTY 22 BITTERN LAKE	153	–	–	–	–	3	33,815	1.9	22.10
(Cont.) EDBERG	150	–	–	–	–	5	72,621	3.3	48.41
FERINTOSH	155	–	–	–	–	2	6,000	1.2	3.87
HAY LAKES	318	–	–	–	–	9	16,782	2.8	5.27
NEW NORWAY	309	–	–	–	–	7	1,687	2.2	.54
ROSALIND	197	1	3,998	5.0	20.29	2	5,105	1.0	2.59
TOTAL	10,072	60	478,266	5.9	47.48	536	4,920,995	5.3	48.85
CNTY 23, RED DEER	13,664	86	1,175,766	6.2	86.04	886	6,050,782	6.4	44.28
INNISFAIL	5,444	11	38,579	2.0	7.08	137	1,504,330	2.5	27.63
SYLVAN LAKE	3,779	13	202,963	3.4	53.70	112	928,769	2.9	24.57
BOWDEN	1,021	3	4,079	2.9	3.99	30	100,041	2.9	9.79
DELBURNE	555	–	–	–	–	14	49,852	2.5	8.98
ELNORA	278	–	–	–	–	4	39,683	1.4	14.27
PENHOLD	1,588	3	7,648	1.8	4.81	39	1,026,182	2.4	64.62
NORGLENWOLD	84	–	–	–	–	2	165,000	2.3	196.42
TOTAL	26,413	116	1,429,035	4.3	54.10	1,224	9,864,639	4.6	37.34
CNTY 24, VERMILION RIVER	7,533	40	750,776	5.3	99.66	509	4,018,853	6.7	53.34
KITSCOTY	545	2	3,440	3.6	6.31	8	6,169	1.4	1.13
VERMILION	3,745	15	157,595	4.0	42.08	116	1,391,015	3.0	37.14
DEWBERRY	181	1	38,000	5.5	209.94	5	668.858	2.7	369.53
MARWAYNE	500	1	1,217	2.0	2.43	13	41,381	2.6	8.27
PARADISE VALLEY	177	1	3,000	5.6	16.94	3	29,981	1.6	16.93
TOTAL	12,681	60	954,028	4.7	75.23	654	6,156,257	5.1	48.54
CNTY 25, LEDUC	13,296	72	783,136	5.4	58.90	721	8,368,940	5.4	62.94
LEDUC	12,471	31	164,427	2.4	13.18	295	2,439,080	2.3	19.55
CALMAR	1,118	1	2,884	.8	2.57	29	216,015	2.5	19.32
DEVON	3,931	1	2,193	.2	.55	56	565,815	1.4	14.39
BRETON	548	4	21.152	7.2	38.59	15	75.305	2.7	13.74
NEW SAREPTA	461	3	6,201	6.5	13.45	13	104,780	2.8	22.72
THORSBY	737	3	8,443	4.0	11.45	29	716,091	3.9	97.16
WARBURG	552	–	–	–	–	13	55,694	2.3	10.08
ITASKA BEACH	6	–	–	–	–	2	176,614	33.3	2,943.56
GOLDEN DAYS	37	–	–	–	–	1	195	2.7	.52
SUNDANCE BEACH	14	–	–	–	–	1	10,651	7.1	76.07
BEAUMONT	3,202	3	11,357	.9	3.54	25	104,500	.7	3.26
TOTAL	36,373	118	999,793	3.2	27.48	1,200	12,833,680	3.2	35.28
CNTY 26, LETHBRIDGE	8,779	65	631,228	7.4	71.90	649	4,305,751	7.3	49.04
COALDALE	4,671	5	89,928	1.0	19.25	106	1,056,328	2.2	22.61
PICTURE BUTTE	1,506	2	16,790	1.3	11.14	37	131,728	2.4	8.74
BARONS	323	–	–	–	–	10	29,085	3.0	9.00
NOBLEFORD	580	2	201	3.4	.34	13	17,690	2.2	3.05
COALHURST	1,119	3	149,196	2.6	133.32	21	221,016	1.8	19.75
TOTAL	16,978	77	887,343	4.5	52.26	836	5,761,598	4.9	33.93
CNTY 27, MINBURN	4,041	27	777,029	6.6	192.28	278	1,682,604	6.8	41.63
MINBURN	146	–	–	–	–	3	8,251	2.0	5.65
MANNVILLE	788	4	3,917	5.0	4.97	16	114,801	2.0	14.56
VEGREVILLE	5,251	15	45,804	2.8	8.72	127	564,367	2.4	10.74
INNISFREE	255	–	–	–	–	4	4,299	1.5	1.68
LAVOY	134	–	–	–	–	5	4,753	3.7	3.54
TOTAL	10,615	46	826,750	4.3	77.88	433	2,379,075	4.0	22.41
CNTY 28, LAC STE. ANNE	7,614	33	623,873	4.3	81.93	355	3,451,505	4.6	45.33
ONOWAY	669	–	–	–	–	25	154,508	3.7	23.09
MAYERTHORPE	1,475	2	67,048	1.3	45.45	30	679,878	2.0	46.09
ALBERTA BEACH	510	5	27,881	9.8	54.66	35	207,587	6.8	40.70
CASTLE ISLAND	5	–	–	–	–	–	–	–	–
SUNSET POINT	89	1	7,383	11.2	82.95	3	9,583	3.3	10.76
SANGUDO	424	–	–	–	–	13	52,513	3.0	12.38
WESTCOVE	46	–	–	–	–	3	107,369	6.5	233.41
YELLOWSTONE	73	–	–	–	–	1	1,000	1.3	1.36
ROSS HAVEN	59	2	72,200	33.8	1,223.72	3	75,825	5.0	128.51
VAL QUENTIN	107	1	870	9.3	8.13	3	3,359	2.8	3.13
SILVER SANDS	72	–	–	–	–	3	4,051	4.1	5.62
NAKAMUN PARK	7	–	–	–	–	–	–	–	–
SOUTH VIEW	33	–	–	–	–	–	–	–	–
TOTAL	11,183	44	799,255	3.9	71.47	474	4,747,178	4.2	42.44

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1983 (Cont.)

MUNICIPALITY	1983 POP.	1983 FIRE COUNT	1983 AMOUNT OF LOSS	1983 FIRE RATE	1983 PER CAPITA LOSS	10 YEAR TOTAL FIRE COUNT	10 YEAR TOTAL AMOUNT OF LOSS	10 YEAR AVERAGE FIRE RATE	10 YEAR AVERAGE PER CAPITA LOSS
CNTY 29, FLAGSTAFF	4,507	35	502,731	7.7	111.54	402	2,326,430	8.9	51.61
SEDGEWICK	879	—	—	—	—	13	71,909	1.4	8.18
ALLIANCE	208	—	—	—	—	10	12,697	4.8	6.10
DAYSLAND	700	2	63,895	2.8	91.27	21	89,607	3.0	12.80
HARDISTY	680	5	108,909	7.3	160.16	33	206,025	4.8	30.29
FORESTBURG	955	2	1,320	2.0	1.38	23	44,210	2.4	4.62
GALAHAD	175	—	—	—	—	6	21,503	3.4	12.28
HEISLER	212	2	68,776	9.4	324.41	7	69,927	3.3	32.98
KILLAM	1,005	1	100	.9	.09	26	367,376	2.5	36.55
LOUGHEED	261	—	—	—	—	6	17,733	2.2	6.79
STROME	281	3	2,541	10.6	9.04	19	459,816	6.7	163.63
TOTAL	9,863	50	748,272	5.0	75.86	566	3,687,233	5.7	37.38
CNTY 30, LAMONT	4,687	34	235,737	7.2	50.29	265	1,928,507	5.6	41.14
LAMONT	1,673	3	26,978	1.7	16.12	20	337,043	1.1	20.14
CHIPMAN	281	1	500	3.5	1.77	8	118,233	2.8	42.07
MUNDARE	655	3	7,616	4.5	11.62	10	25,100	1.5	3.83
ANDREW	569	3	112,998	5.2	198.59	28	788,538	4.9	138.58
BRUDERHEIM	1,238	5	52,296	4.0	42.24	27	230,960	2.1	18.65
TOTAL	9,103	49	436,125	5.3	47.91	358	3,428,381	3.9	37.66
CNTY 31, PARKLAND	23,626	123	2,342,034	5.2	99.12	1,512	15,122,473	6.3	64.00
STONY PLAIN	5,291	3	36,422	.5	6.88	58	248,496	1.0	4.69
BETULA BEACH	8	—	—	—	—	1	744	12.5	9.30
EDMONTON BEACH	329	1	25,000	3.0	75.98	8	157,968	2.4	48.01
ENTWISTLE	468	—	—	—	—	5	75,871	1.0	16.21
KAPASIWIN	4	—	—	—	—	4	44,603	100.0	1,115.07
LAKEVIEW	16	—	—	—	—	—	—	—	—
POINT ALISON	2	—	—	—	—	2	6,050	100.0	302.50
SEBA BEACH	126	1	2,700	7.9	21.42	9	52,030	7.1	41.29
SPRUCE GROVE	11,307	29	75,657	2.5	6.69	334	1,671,327	2.9	14.78
DRAYTON VALLEY	4,867	15	211,597	3.0	43.47	179	835,188	3.6	17.16
WABAMUN	705	1	20,500	1.4	29.07	10	72,254	1.4	10.24
TOTAL	46,749	173	2,713,910	3.7	58.05	2,122	18,287,004	4.5	39.11
M.D. 6, CARDSTON	4,292	34	387,779	7.9	90.34	262	2,366,364	6.1	55.13
CARDSTON	3,267	9	215,021	2.7	65.81	105	846,177	3.2	25.90
MAGRATH	1,576	7	22,681	4.4	14.39	61	216,086	3.8	13.71
GLENWOOD	266	1	951	3.7	3.57	9	13,582	3.3	5.10
HILLSPRING	220	—	—	—	—	3	19,018	1.3	8.64
TOTAL	9,621	51	626,432	5.3	65.11	440	3,461,227	4.5	35.97
M.D. 9, PINCHER CREEK	2,970	26	299,115	8.7	100.71	178	2,927,436	5.9	98.56
PINCHER CREEK	3,712	7	8,754	1.8	2.35	95	803,167	2.5	21.63
COWLEY	304	—	—	—	—	6	7,302	1.9	2.40
TOTAL	6,986	33	307,869	4.7	44.06	279	3,737,905	3.9	53.50
M.D. 14, TABER	5,637	41	1,109,188	7.2	196.76	431	3,272,211	7.6	58.04
TABER	5,988	15	32,986	2.5	5.50	196	8,247,299	3.2	137.73
VAUXHALL	1,076	2	55,000	1.8	51.11	25	472,986	2.3	43.95
GRASSY LAKE	211	—	—	—	—	12	35,436	5.6	16.79
BARNWELL	359	1	15,000	2.7	41.78	1	15,000	.2	4.17
TOTAL	13,271	59	1,212,174	4.4	91.34	665	12,042,932	5.0	90.74
M.D. 26, WILLOW CREEK	4,534	43	724,105	9.4	159.70	398	2,052,972	8.7	45.27
STAVELY	548	1	529	1.8	.96	9	470,024	1.6	85.77
NANTON	1,671	3	517,476	1.7	309.68	43	1,150,072	2.5	68.82
CLARESHOLM	3,493	10	100,317	2.8	28.71	164	1,678,341	4.6	48.04
FT. MACLEOD	3,139	6	63,098	1.9	20.10	102	682,116	3.2	21.73
GRANUM	399	—	—	—	—	21	1,884,934	5.2	472.41
TOTAL	13,784	63	1,405,525	4.5	101.96	737	7,918,459	5.3	57.44
M.D. 31, FOOTHILLS	9,725	50	607,262	5.1	62.44	503	5,222,913	5.1	53.70
HIGH RIVER	5,049	10	86,866	1.9	17.20	107	1,402,551	2.1	27.77
BLACK DIAMOND	1,545	1	200	.6	.12	23	179,288	1.4	11.60
OKOTOKS	4,919	6	93,742	1.2	19.05	78	462,382	1.5	9.39
BLACKIE	343	1	673	2.9	1.96	4	40,079	1.1	11.68
CAYLEY	232	—	—	—	—	3	37,868	1.2	16.32
TURNER VALLEY	1,337	2	66,898	1.4	50.03	30	532,929	2.2	39.86
LONGVIEW	291	1	40,000	3.4	137.45	3	110,301	1.0	37.90
TOTAL	23,441	71	895,641	3.0	38.20	751	7,988,311	3.2	34.07

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1983 (Cont.)

MUNICIPALITY	1983 POP.	1983 COUNT	1983 AMOUNT OF LOSS	1983 FIRE RATE	1983 PER CAPITA LOSS	10 YEAR TOTAL FIRE COUNT	10 YEAR TOTAL AMOUNT OF LOSS	10 YEAR AVERAGE FIRE RATE	10 YEAR AVERAGE PER CAPITA LOSS
M.D. 34, ACADIA	604	4	41,724	6.6	69.07	18	171,399	2.9	28.37
EMPRESS	254	3	67,500	11.8	265.74	9	76,443	3.5	30.09
TOTAL	858	7	109,224	8.1	127.30	27	247,842	3.1	28.88
M.D. 44, ROCKY VIEW	16,703	160	1,472,195	9.5	88.13	1,625	12,485,385	9.7	74.74
AIRDRIE	10,431	21	277,510	2.0	26.60	105	1,122,463	1.0	10.76
BEISEKER	648	2	58,500	3.0	90.27	22	262,002	3.3	40.43
COCHRANE	4,044	21	441,255	5.1	109.11	101	1,328,543	2.4	32.85
CROSSFIELD	1,358	—	—	—	—	16	351,928	1.1	25.91
IRRICANA	726	4	27,947	5.5	38.49	14	52,330	1.9	7.20
CHESTERMERE LAKE	550	3	68,090	5.4	123.80	10	142,601	1.8	25.92
TOTAL	34,460	211	2,345,497	6.1	68.06	1,893	15,745,252	5.4	45.69
M.D. 47, STARLAND	2,068	17	113,155	8.2	54.71	134	931,867	6.4	45.06
MORRIN	245	1	1,898	4.0	7.74	7	119,534	2.8	48.78
DELIA	239	2	120,580	8.3	504.51	8	134,636	3.3	56.33
MUNSON	148	—	—	—	—	2	1,949	1.3	1.31
RUMSEY	93	1	32,000	10.7	344.08	5	57,447	5.3	61.77
TOTAL	2,793	21	267,633	7.5	95.82	156	1,245,433	5.5	44.59
M.D. 48, KNEEHILL	5,761	36	578,192	6.2	100.36	307	3,090,102	5.3	53.63
THREE HILLS	2,008	6	32,568	2.9	16.21	75	154,988	3.7	7.71
ACME	492	2	29,000	4.0	58.94	10	217,714	2.0	44.25
TROCHU	880	5	92,700	5.6	105.34	22	146,454	2.5	16.64
CARBON	438	—	—	—	—	6	4,374	1.3	.99
LINDEN	461	—	—	—	—	7	1,417	1.5	.30
TORRINGTON	230	1	32,256	4.3	140.24	14	86,724	6.0	37.70
TOTAL	10,270	50	764,716	4.8	74.46	441	3,701,773	4.2	36.04
M.D. 52, PROVOST	2,611	33	220,196	12.6	84.33	291	2,130,976	11.1	81.61
PROVOST	1,756	4	4,573	2.2	2.60	67	1,423,258	3.8	81.05
AMISK	212	—	—	—	—	3	9,000	1.4	4.24
CZAR	184	—	—	—	—	7	11,886	3.8	6.45
HUGHENDEN	251	—	—	—	—	7	42,221	2.7	16.82
TOTAL	5,014	37	224,769	7.3	44.82	375	3,617,341	7.4	72.14
M.D. 61, WAINWRIGHT	3,837	36	733,687	9.3	191.21	318	2,271,767	8.2	59.20
WAINWRIGHT	4,477	12	23,472	2.6	5.24	153	891,496	3.4	19.91
IRMA	474	1	360	2.1	.75	21	82,867	4.4	17.48
CHAUVIN	335	—	—	—	—	11	830,789	3.2	247.99
EDGERTON	389	1	17,000	2.5	43.70	19	190,109	4.8	48.87
TOTAL	9,512	50	774,519	5.2	81.42	522	4,267,028	5.4	44.85
M.D. 87, BONNYVILLE	9,407	34	344,148	3.6	31.54	381	3,169,657	4.0	33.69
BONNYVILLE	4,664	19	716,508	4.0	153.62	129	2,244,794	2.7	48.13
COLD LAKE	2,245	8	25,761	3.5	32.59	70	347,009	3.1	15.45
GRAND CENTRE	3,119	11	149,355	3.5	47.88	121	1,774,196	3.8	56.88
BONNYVILLE BEACH	43	—	—	—	—	2	20,180	4.6	46.93
GLENDON	455	1	2,000	2.1	4.39	14	45,610	3.0	10.02
PELICAN NARROWS	42	2	1,470	47.6	35.00	2	1,470	4.7	3.50
TOTAL	19,975	75	1,239,242	3.7	62.03	719	7,602,916	3.5	38.06
M.D. 90, STURGEON	13,682	71	1,248,432	5.1	91.24	996	12,668,741	7.2	92.59
MORINVILLE	5,109	5	66,459	.9	13.00	70	518,867	1.3	10.15
GIBBONS	2,592	3	7,320	1.1	.50	35	217,143	1.3	8.37
SANDY BEACH	78	—	—	—	—	1	22,000	1.2	28.20
BON ACCORD	1,425	2	3,340	1.4	2.34	20	111,965	1.4	7.85
LEGAL	1,042	1	600	.9	.57	22	113,944	2.1	10.93
REDWATER	2,197	4	76,457	1.8	34.80	40	349,364	1.8	15.90
TOTAL	26,125	86	1,396,608	3.2	53.45	1,184	14,002,024	4.5	53.59
M.D. 92, WESTLOCK	7,059	31	506,921	4.3	71.81	292	4,280,410	4.1	60.63
WESTLOCK	4,432	5	38,260	1.1	8.63	79	1,185,673	1.7	26.75
CLYDE	376	3	39,100	7.9	103.98	18	121,207	4.7	32.23
TOTAL	11,867	39	584,281	3.2	49.23	389	5,587,290	3.2	47.08
M.D. 130, SMOKY RIVER	2,858	22	376,770	7.6	131.82	229	2,122,906	8.0	74.27
FALHER	1,204	2	18,097	1.6	15.03	40	502,172	3.3	41.70
GIROUXVILLE	325	1	36,300	3.0	111.69	15	456,992	4.6	140.61
MCLENNAN	1,176	5	34,468	4.2	29.30	49	873,600	4.1	74.28
DONNELLY	382	1	1,351	2.6	3.53	31	233,729	8.1	61.18
TOTAL	5,945	31	466,986	5.2	78.55	364	4,189,399	6.1	70.46
M.D. 133, SPIRIT RIVER	891	24	230,601	26.9	258.81	126	653,762	14.1	73.37
SPIRIT RIVER	1,104	1	300	.9	.27	39	151,835	3.5	13.75

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1983 (Cont.)

MUNICIPALITY		1983					10 YEAR TOTAL		10 YEAR AVERAGE	
		POP.	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS
M.D. 133 (Cont.)	RYCROFT	649	2	16,520	3.0	25.45	20	613,234	3.0	94.48
	TOTAL	2,644	27	247,421	10.2	93.57	185	1,418,831	6.9	53.66
M.D. 135,	PEACE RIVER	1,520	14	134,754	9.2	88.65	205	1,562,423	13.4	102.79
	BERWYN	674	–	–	–	–	6	155,336	.8	23.04
	GRIMSHAW	2,488	11	20,166	4.4	8.10	79	546,786	3.1	21.97
	PEACE RIVER	6,043	29	2,326,767	4.7	385.03	269	4,577,615	4.4	75.75
	TOTAL	10,725	54	2,481,687	5.0	231.39	559	6,842,160	5.2	63.79
M.D. 136,	FAIRVIEW	1,889	15	208,288	7.9	110.26	162	1,496,309	8.5	79.21
	FAIRVIEW	2,869	13	176,475	4.5	61.51	114	3,979,913	3.9	138.72
	TOTAL	4,758	28	384,763	5.8	80.86	276	5,476,222	5.8	115.09
I.D. #1		4,703	54	321,997	11.4	68.46	538	5,360,955	11.4	113.99
	IRVINE	360	–	–	–	–	10	85,215	2.7	23.67
	REDCLIFF	3,814	11	18,109	2.8	4.74	146	628,467	3.8	16.47
	TOTAL	8,877	65	340,106	7.3	38.31	694	6,074,637	7.8	68.43
I.D. #4		176	3	74,228	17.0	421.75	13	144,244	7.3	81.95
I.D. #6		241	6	13,785	24.8	57.19	60	629,397	24.8	261.16
	CROWSNEST PASS	7,577	46	922,901	6.0	121.80	250	3,366,042	3.2	44.42
	TOTAL	7,818	52	936,686	6.6	119.81	310	3,995,439	3.9	51.10
I.D. #7		1,258	5	4,424	3.9	3.51	98	1,526,941	7.7	121.37
I.D. #8		1,268	10	1,027,067	7.8	809.98	110	2,856,446	8.6	225.27
	GHOST LAKE	42	1	146	23.8	3.47	5	9,353	11.9	22.26
	CANMORE	3,745	6	8,400	1.6	2.24	94	960,826	2.5	25.65
	TOTAL	5,055	17	1,035,613	3.3	204.86	209	3,826,625	4.1	75.69
I.D. #9		1,949	7	27,292	3.5	14.00	111	1,423,446	5.6	73.03
	BANFF	5,000	18	418,978	3.6	83.79	167	3,311,762	3.3	66.23
	TOTAL	6,949	25	446,270	3.5	64.22	278	4,735,208	4.0	68.14
I.D. #10		9,201	41	350,899	4.4	38.13	440	5,800,622	4.7	63.04
	ROCKY MTN. HOUSE	4,735	18	373,507	3.8	78.88	143	1,675,586	3.0	35.38
	CAROLINE	431	2	5,801	4.6	13.45	9	38,004	2.0	8.81
	TOTAL	14,367	61	730,207	4.2	50.82	592	7,514,212	4.1	52.30
I.D. #12		25	–	–	–	–	61	654,782	244.0	2,619.12
	JASPER	3,970	6	34,828	1.5	8.77	109	2,842,680	2.7	71.60
	TOTAL	3,995	6	34,828	1.5	8.71	170	3,497,462	4.2	87.54
I.D. #13		36	–	–	–	–	7	82,308	19.4	228.63
I.D. #14		8,119	64	1,513,928	7.8	186.46	597	15,591,759	7.3	192.04
	WILDWOOD	450	1	4,337	2.2	9.63	10	74,197	2.2	16.48
	EVANSBURG	784	3	50,500	3.8	64.41	18	140,300	2.2	17.89
	EDSON	7,329	19	167,733	2.5	22.88	168	1,291,306	2.2	17.61
	HINTON	8,825	32	193,749	3.6	21.95	312	3,622,674	3.5	41.05
	TOTAL	25,507	119	1,930,247	4.6	75.67	1,105	20,720,236	4.3	81.23
I.D. #15		2,670	18	159,015	6.7	59.55	216	3,303,743	8.0	123.73
	WHITECOURT	5,408	15	71,235	2.7	13.17	254	2,127,417	4.6	39.33
	FT. ASSINIBOINE	217	–	–	–	–	16	87,256	7.3	40.21
	TOTAL	8,295	33	230,250	3.9	27.75	486	5,518,416	5.8	66.52
I.D. #16		5,350	30	414,921	5.6	77.55	489	17,209,929	9.1	321.68
	VALLEYVIEW	2,232	12	335,305	5.3	150.22	76	945,606	3.4	42.36
	FOX CREEK	1,978	4	5,800	2.0	2.93	44	1,235,111	2.2	62.44
	GRANDE CACHE	4,624	7	44,470	1.5	9.61	104	796,655	2.2	17.22
	TOTAL	14,184	53	800,496	3.7	56.43	713	20,187,301	5.0	142.32
I.D. #17		11,699	95	2,183,974	8.1	186.68	833	15,353,933	7.1	131.24
	HIGH PRAIRIE	2,580	7	29,658	2.7	11.49	113	4,958,300	4.3	192.18
	SWAN HILLS	2,497	7	78,837	2.8	31.57	53	825,850	2.1	33.07
	KINUSO	285	2	57,441	7.0	201.54	5	89,508	1.7	31.40
	SLAVE LAKE	4,562	6	41,658	1.3	9.13	141	800,215	3.9	17.54
	NAMPA	334	–	–	–	–	9	963,563	2.6	288.49
	TOTAL	21,957	117	2,391,568	5.3	108.92	1,154	22,991,369	5.2	104.71
I.D. #18		9,605	60	17,245,687	6.2	1,795.49	765	68,440,600	7.9	712.55
	LAC LA BICHE	2,069	6	37,652	2.8	18.19	85	714,024	4.1	34.51
	PLAMONDON	271	–	–	–	–	4	1,070,553	1.4	395.03
	TOTAL	11,945	66	17,283,339	5.5	1,446.90	854	70,225,177	7.1	587.90
I.D. #19		1,757	8	110,847	4.5	63.08	154	2,367,922	8.7	134.77
	WANHAM	266	–	–	–	–	22	131,971	8.2	49.61
	EAGLESHAM	207	–	–	–	–	3	10,363	1.4	5.00
	TOTAL	2,230	8	110,847	3.5	49.70	179	2,510,256	8.0	112.56
I.D. #20		3,000	12	164,049	4.0	54.68	112	1,452,658	3.7	48.42

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1983 (Cont.)

MUNICIPALITY	1983					10 YEAR TOTAL		10 YEAR AVERAGE	
	POP.	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS
I.D. #21	2,979	18	395,237	6.0	132.67	151	2,023,958	5.0	67.94
HINES CREEK	529	7	172,068	13.2	325.27	32	1,011,738	6.0	191.25
TOTAL	3,508	25	567,305	7.1	161.71	183	3,035,696	5.2	86.53
I.D. #22	4,250	15	524,716	3.5	123.46	227	2,722,624	5.3	64.06
MANNING	1,262	3	31,826	2.3	25.21	36	316,596	2.8	25.08
TOTAL	5,512	18	556,542	3.2	100.96	263	3,039,220	4.7	55.13
I.D. #23	5,837	59	1,037,600	10.1	177.76	484	8,203,685	8.2	140.54
HIGH LEVEL	2,673	8	238,171	2.9	89.10	89	2,811,571	3.3	105.18
RAINBOW LAKE	847	4	302,574	4.7	357.23	20	1,358,603	2.3	160.40
TOTAL	9,357	71	1,578,345	7.5	168.68	593	12,373,859	6.3	132.24
I.D. #24	188	1	16,125	5.3	85.77	6	5,271,889	3.1	2,804.19
INDIAN RESERVES	42,377	79	1,672,202	1.8	39.46	727	9,570,386	1.7	22.58
S.A. #2	2,565	21	170,651	8.1	66.53	162	1,513,982	6.3	59.02
HANNA	2,996	8	6,357	2.6	2.12	78	747,573	2.6	24.95
TOTAL	5,561	29	177,008	5.2	31.83	240	2,261,555	4.3	40.66
S.A. #3	1,701	9	562,997	5.2	330.98	93	1,075,325	5.4	63.21
CEREAL	252	—	—	—	—	5	130,009	1.9	51.59
OYEN	1,021	3	1,631	2.9	1.59	28	166,655	2.7	16.32
YOUNGSTOWN	297	1	190	3.3	.63	5	23,772	1.6	8.00
TOTAL	3,271	13	564,818	3.9	172.67	131	1,395,761	4.0	42.67
S.A. #4	1,776	13	105,073	7.3	59.16	102	1,251,753	5.7	70.48
VETERAN	318	—	—	—	—	12	1,865,554	3.7	586.65
CONSORT	632	1	1,130	1.5	1.78	26	764,771	4.1	121.00
TOTAL	2,726	14	106,203	5.1	38.95	140	3,882,078	5.1	142.40
CALGARY	620,692	2,152	15,739,090	3.4	25.35	29,635	120,946,612	4.7	19.48
CAMROSE	12,809	21	107,789	1.6	8.41	289	1,594,235	2.2	12.44
DRUMHELLER	6,671	20	133,884	2.9	20.06	226	2,467,882	3.3	36.99
EDMONTON	560,085	1,601	12,513,567	2.8	22.34	17,896	130,493,843	3.1	23.29
FT. MCMURRAY	34,494	125	1,004,612	3.6	29.12	1,629	9,017,256	4.7	26.14
GRANDE PRAIRIE	24,076	91	679,996	3.7	28.24	1,631	7,532,191	6.7	31.28
LETHBRIDGE	58,086	238	486,992	4.0	8.38	3,019	16,219,167	5.1	27.92
LLOYDMINSTER	9,226	35	426,169	3.7	46.19	241	3,254,859	2.6	35.27
MEDICINE HAT	41,493	127	764,746	3.0	18.43	2,638	9,481,007	6.3	22.84
RED DEER	50,257	168	5,540,676	3.3	110.24	1,904	11,864,227	3.7	23.60
ST. ALBERT	35,032	70	179,720	1.9	5.13	1,401	5,886,691	3.9	16.80
WETASKIWIN	10,022	19	689,962	1.8	68.84	243	7,325,318	2.4	73.09

SECTION THREE

GLOSSARY OF TERMINOLOGY

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ACT OR OMISSION — the human element by which someone has done something (an act), or failed to do something (an omission). The act or omission indicates whether the fire was deliberate, neglectful or accidental.

Incendiary or Set Fires - includes arson, suspected incendiarism, riot, mischief or vandalism.

Misuse of Source of Ignition - includes disposal of smoker's material, thawing, inadequate control of an open fire, children playing, welding or cutting too close to combustible material or torch too close to combustible material.

Misuse of Material Ignited - includes fuel spilled accidentally, improper fuelling technique, cleaning or washing parts, improper container, overheating cooking oil, combustible placed too close to heat, and improper storage.

Mechanical and Electrical Failure or Malfunction - includes part failure, automatic or manual control failure, electrical short circuit and part worn out.

Construction, Design or Installation Deficiency - includes construction or design deficiency, installation too close to a combustible, other installation deficiency and over fusing.

Misuse of Equipment - overfuelling, includes any misuse of equipment or tools.

Human Failing - includes person asleep, temporary loss of judgement, physical disability, panic, influence of alcohol or drugs ignorance of hazard.

AREA OF ORIGIN — the area of a building or vehicle where the fire started.

Means of Egress - the area allowing an individual transit or a way of going out. Includes hallway, stairway, escalator, lobby and elevator.

Assembly, Sales Area - areas where groups of people gather. Includes theatre, arena, lounge, living room, sales or show room, library, museum and sports facility.

Function Area - the area where a mode of action or activity is undertaken. Includes sleeping area, dining area, bar, washroom, office, laboratory, printing and photographic reproduction, kitchen, laundry room, operating room, performance area and manufacturing area.

Storage Area - the area inside a building where items are stored. Includes product storage area, closet, equipment area, records storage area, shipping and receiving area, trash and rubbish area, vehicle garage and agricultural product storage.

Service Facilities - conveyance items such as dumbwaiters, service shafts, laundry and garbage chutes, heating and cooking ducts, and chimneys or gas vents.

Structural Area - includes crawl space, balcony, ceiling and floor assembly, ceiling and roof assembly, wall assembly, exterior wall or exterior roof, awning or canopy.

Vehicle Area - includes engine area, fuel area, control area, passenger area, and cargo area.

Outside Area - includes open area such as lawn, field or park, court, patio, parking area, outdoor storage area, and trash or rubbish area.

FUEL OR ENERGY — the fuel associated with the source of ignition. Includes coal, wood, fuel oil, gasoline, natural gas or other fuel gases, smoker's material, electricity, lightning, or exposures.

INJURIES — a person accidentally injured as a direct result of a fire.(A member of the fire department accidentally injured while in the process of fighting a fire or injured as a result of an accident while en route to or returning from the scene of an actual fire is considered a fire action injury.)

Minor Injury - an injury that does not require hospitalization of over a 24-hour period or absence from work of not more than one full day.

Light Injury - an injury that requires admission to a hospital of over 24 to 48 hours and/or absence from work for a period of two to fifteen days.

Serious Injury - an injury that requires admission to a hospital for a period of more than 48 hours and/or an absence from work for a period exceeding fifteen days.

MATERIAL FIRST IGNITED — the actual material that ignites and creates the fire condition.

Structural Components, Finish Materials - includes roof covering, wall covering, floor covering, structural component, ceiling covering, and insulation.

Furniture, Furnishings - includes furniture, ironing board, mattress, bedding, drapery and broom, mop or brush.

Clothing, Textiles - includes clothing, fabric, fur and tarpaulin.

Wood, Paper Products - includes wood, wood shavings, paper, cardboard and paper stock.

Flammable Liquids - includes gasoline, fuel oil, flammable liquids, paint, varnish, tar, asphalt, polish and wax.

Flammable Gases - includes natural gas, propane, anaesthetic gas, acetylene and hydrogen.

Chemicals - includes starch, flour, cellulose, nitrate, plastic, oxidizing material, magnesium and alloys, titanium, natural or synthetic rubber, and ammonium nitrate.

Agricultural, Forestry Products - includes fibres, grains, hay, trees, felled timber, grass, fertilizer and manure.

Miscellaneous - includes coal, garbage, trash, oily rags and artificial trees.

PROPERTY CLASSIFICATION — the principal use or occupancy of the building.

Assembly - property for the gathering of persons for civic, political, travel, religious, social, educational or recreational purposes. Includes theatres, amusement or recreation places, schools, colleges, universities, churches, social or sport clubs, libraries and museums, eating establishments and passenger terminals.

Institutional - property for medical treatment, or care of persons suffering from illness, disease or infirmity, for the care of infants, convalescents or aged persons and for penal or corrective purposes. Includes prisons, jails, reformatories, homes for the aged, children's hospitals, hospitals and clinics.

Residential - property in which sleeping accommodation is provided for normal residential purposes. Includes one and two family dwellings, apartments, rooming or boarding houses, hotels, motels, dormitories and mobile homes.

Business and Personal Service - property for conducting business. Includes offices, personal services such as hairdressing, and data processing or storage facilities.

Mercantile - property used for the display and sale of merchandise. Includes food and beverage sales, textile and clothing sales, furniture and appliance sales, books and specialty sales, recreational and hobby supply sales, repair shops, laundries, vehicle and boat sales and department or variety stores.

Industrial Manufacturing Properties - property where raw materials are transformed into new products and where the component parts of manufactured products are assembled. Includes chemical, petroleum, paint and plastic manufacturing; wood, furniture, and paper manufacturing; metal product and electrical equipment manufacturing; food processing; beverage, tobacco, soap and margarine manufacturing; textile manufacturing; footwear and wearing apparel manufacturing; and vehicle and related equipment manufacturing.

Storage Properties - property used primarily for the storage or sheltering of goods, merchandise, products, vehicles, or animals. Includes agricultural product storage; textile, fibre and clothing storage; processed food and beverage storage; flammable liquids, gas and petroleum products storage; wood, furniture, and paper products storage; chemical, paint and plastic storage; metal products, machinery and electrical appliance storage and vehicle storage.

Special Property - Transportation Equipment - mainly outdoor property and transport equipment. Includes outdoor property, piers, buildings under construction or demolition, watercraft, rail transport vehicles, ground transport vehicles, aircraft and other special equipment.

Miscellaneous - includes laboratories, farm facilities, outbuildings, utilities, glass and pottery manufacturing, mining, communications and nucleonics.

SOURCE OF IGNITION — the actual equipment, device or object which brings about ignition.

Cooking Equipment - includes stove, range, food warming appliance, deep fat fryer, broiler and portable cooking unit.

Heating Equipment - includes central heating unit, service water heater, space heater, fireplace, chimney, flue pipe and steam or hot water pipe.

Electrical Distribution Equipment - includes dryer, air conditioning equipment, pressing iron, internal combustion engine, tarpot and incinerator.

Smoker's Material and "Open" Flames - cigarettes, pipes, cigars and/or matches, lighters when used in conjunction with smoking. Includes matches and lighters not associated with smoker's material, candles, cutting torches, welding equipment and hot ashes.

Exposure - includes exposure from an attached or detached structure, lumber yard, open fire, forest, grass and brush.

Miscellaneous - includes heat treatment equipment, industrial oven, printing equipment, fireworks, conveyors, commercial and industrial machinery, and chemical reactions.

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